NATIONAL OPEN UNIVERSITY OF NIGERIA

COURSE CODE : **CIT101**

COURSE TITLE:
COMPUTERS IN SOCIETY

COURSE GUIDE

CIT101
COMPUTERS IN SOCIETY

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Introduction

The aim and objective of *Computers in Society* as a course is computer literacy. Information Technology is the frontier hero of the new century, driven by ambition and full of courage, replicating itself like a virus and sweeping all before it. So in order not to be marginalized one needs to get involved as Information Technology influences virtually all the areas of human endeavour.

What You will Learn in this Course

This course will give you in brief what you need to know in Computer Science and Technology. At the end of the course you will be an expert of some sort in Computer Science and Technology.

Working through this Course

Each module, each unit, in the course contains notes as well as set exercises. The set exercises are listed in form of a table. The table has two volumes. The last column contains the heading “what you do” while the right column is headed “comments/prompts”. The left column contains the steps that you must follow. The right column serves as additional information.

Computers will be provided at study centres and will be equipped with the required programs. If you have the means, buy your PC and the stipulated software.

Each unit contains a *Tutor-Marked Assignment,* which must be done as stipulated and handed to the tutor on schedule.

Assessment

The final grade in the course will have two components; continuous assessment and final examination. Basically, the tutor-marked assignment will form the continuous assessments while NOUN will inform you about the final examination.

How to Get Most from this Course

In distance learning, the study units replace the University lecturer. This is one of the great advantages of distance learning, you can read and work through specially designed study materials at your own pace, and at a time and place that suits you best. Think of it as reading the lecture instead of listening to a lecturer. Just as a lecturer might give you an in-

class exercise, your study units provide exercises for you to do at appropriate points.

Working through the assignments and exercises will help you to achieve the objectives of the unit and prepare you for the final examination. If you run into trouble, arrange to meet your training tutor. Note the following:

1. Read this course guide thoroughly
2. Organise a study schedule. Whatever method you choose to use, you should decide on it and write in your own dates for working on each.
3. Once you have created your own study schedule, do everything you can to stick to it. The major reason that students fail is that they get behind with their course work.
4. For each unit, read the introduction and the objectives.
5. Read through the materials. Work through the unit.
6. At the end of the unit, review the objective and see how many of them you have achieved.
7. Do the tutor-marked assignment and submit as required.
8. Proceed unit by unit throughout the course.

Summary

Computers in Society intend to make you computer literate. At the end of the course you will achieve the objective if you follow the instructions and do what you are expected to do.

We wish you a huge success.

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INTRODUCTION

Computer education is the dissemination of computer knowledge into the learners. Computer has influenced virtually all areas of human endeavour. Education is being revolutionized by computers.

Advantages of computer education include the following:

- It enhances use of visualisation tools
- It enhances use of simulation tools
- It enhance introduction of distributed multi-media environment.
- It enhances video conferencing tutorials.
- It assists the implementation of resources sharing in electronic media of library holding and teachers instruction.

The aim of the course is to teach you the fundamentals of Computer Science and its applications. You will be taken through different areas of the computer and will be able to see how all the components fit together:

We will look at hardware, software including operating systems and programs. This course has been divided into 6 Modules, which are made up as follows.

In module 1, you will be introduced to the Principles of Computer Hardware and Software. In addition to this, you will learn the fundamentals of how a computer works.

In module 2, you will be taught the basics of what is meant by the term "Operating System". An overview of Windows 98 is presented in this module. Module 3 introduces you to what the functions are of a word processing program. You will apply the theory that you learn through using Microsoft Word 2000.

Module 4 introduces you to the basics of spreadsheeting. The program that you will be using to gain this knowledge is Microsoft Excel 2000.

Module 5 is devoted to the subject of charting and presentations. Here you will use Microsoft Excel 200 as the simple program for charting and Microsoft Power Point 2000 for presentations.

Finally in module 6, you will have an opportunity to learn more about Networking, the Internet and using Electronic mail (E-mail).

MODULE 1

Unit 1 What is Computer?
Unit 2 Element of a Computer: Hardware
Unit 3 Elements of a Computer: Software
Unit 4 How to Work with a Computer: Switching On and Off the PC
Unit 5 Using a Mouse

UNIT 1 WHAT IS COMPUTER?

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 The Computer System
3.1.1 What is a Computer?
3.1.2 The Digital Computer
3.1.3 History of the Digital Computer
3.1.4 Different Types of Computers
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

No previous computer experience is required to complete this introductory course.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define what is meant by the term “Computer”
- record brief history of the computer.

3.0 MAIN CONTENT

3.1 The Computer System

We will begin this course by taking a closer look at what makes up a Computer System.

3.1.1 What is a Computer?

What is a Computer? Throughout history there have been many forms of computers used by man. However, the modern computer is basically an electronic device which can respond to commands.

A modern computer is designed to receive either a set of instructions from the operator or a program, and then carry out the required tasks by performing calculations on numerical data or by compiling and correlating other forms of information.

Without the development of the computer, our modern world of high technology would not have developed. Computers affect us all and are used in many of today's industries, some of which are:

- Banking transactions (Autobanks)
- Household accounts (Budgets)
- Automated manufacturing (Producing a modern car)
- Communications (Telephone systems)
- Shopping (Buying over the Internet)

In the modern computer world, there are two main types of computers in use, namely analog and digital. This course concentrates on the digital computer, which basically solves problems by performing sums and by dealing with each number digit by digit.

3.1.2 The Digital Computer

A digital computer bases its whole operation on the ability to determine if a switch (sometimes called a gate), is either open or closed. As this type of computer can only recognized two states, its microcircuits are either on or off, while in the case of letters and numbers only O's and 1's are used (e.g. the letter "a" would be represented to the PC as something similar to "00110101).

It would appear from the above that the digital computer performs a relatively simple task, So what makes it so special? There are 2 things that makes a computer special, the first is the speed at which a computer performs this simple task and the second is the amount (volume) of data the computer handles at any one time.

A computer's speed called "clock speed" is measured in millions of cycles per second (megahertz or MHZ), which means that a computer with a clock speed of **66 MHz,** for example an 80486DX **66MHz,** is capable of executing 66 million operations each second.

As mentioned above, the amount of data computer handles during each cycle also makes it special. A computer performs checks on groups of switches, increasing the number of operations it can recognize in each cycle, which means a computer checking two switches at one time, can execute one of four instructions at each cycles.

3.1.3 History of the Digital Computer

1946 saw the development of the first general-purpose all-electronic computer called ENIAC (Electronic Numerical Integrators and Computer). ENIC contained in excess of 18,000 vacuum tubes and had a speed of several hundred multiplications per minute.

The first commercially available electronic computer was called UNIVAC 1. This computer marked the beginning of the computer era.

By 1960 transistors had replaced vacuum tubes as logical components of a computer. This change meant that computer components used less power and had a much longer life span. Computers using this technology were referred to as second generation computers.

Late in the 1960s the integrated circuit was developed which allowed many transistors to be fabricated on one circuit board with inter-connecting wires plated in place.

The microprocessor became a reality in the mid-1970s with introduction of the large scale integrated circuit, which accommodated many thousands of interconnected transistors etched into a single circuit board.

Computers developed in the 1970s were able check eight switches at every cycle. Since then the development of processors that can handle 16, 32 and 64 bits of data at a time had increased the speed of computers.

3.1.4 Different Types of Computers

In the digital computer world there are currently different types of categories, which are based on price and performance. Two of these are:

Personal Computer (PC's)

A PC is a relative low-cost machine usually of desktop size (laptops, notebooks and palmtops are mush smaller).

Main Frames

A mainframe is a large expensive machine with the capability of serving the needs of major business enterprises, government departments and scientific research establishments (the largest and fastest of these are called supercomputers).

SELF ASSESSMENT EXERCISE

Answer True or False

1. Digital Computer uses only 0 and 1.
2. Computer developed in the 70's were able to check eight switches at every cycle.

4.0 CONCLUSION

A computer is an electronic device that is designed to receive either a set of instructions from the operator or a program, and then carryout the required tasks by performing calculations on numerical data or by compiling and correlating other forms of information.

5.0 SUMMARY

You have learnt of the term "Computer" and a brief history of the computer

ANSWER TO SELF ASSESSMENT EXERCISE

1. True
2. True

6.0 TUTOR-MARKED ASSIGNMENT

1. What is a Computer?
2. Give a brief history of computers.

7.0 REFERENCES/FURTHER READING

Ayo, C. K. (1998). *Computer Literacy Operations and Appreciation.* (2nd ed.). Mckay Consult.

Milan, Milenkovic *Operating Systems, Concepts and Design.* (2nd ed.). Tata McGraw Hill.

UNIT 2 ELEMENTS OF A COMPUTER: HARDWARE

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1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Elements of a Computer: Hardware
        3.1.1 Central Processing Unit (CPU) of Microprocessor
        3.1.2 Input Devices
        3.1.3 Output Devices
        3.1.4 Storage Devices
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

A digital computer is a system which comprises several elements some of which are listed in this unit. The system may be divided into two main categories, namely, Hardware and Software. It is not within the scope of this course to engage in a detailed explanation of the technical details of a computer and so this section is simply an overview.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify the main hardware elements of a computer
- identify some computer peripherals.

3.0 MAIN CONTENT

3.1 Elements of a Computer: Hardware

A typical computer system includes the following hardware components:

3.1.1 Central Processing Unit (CPU) of Microprocessor

The CPU located on your computer's main circuit board (Motherboard) is basically the brain of your PC. The CPU may either consist of a single chip of series of chips that perform two main functions. The first of these functions is to perform arithmetic and logical calculation, while

the second function is to time and control the operations of the other elements of your computer.

3.1.2 Input Devices

Computer operators communicates with the computer's CPU by using various input devices to enter data, run programs, or give commands to the CPU. These devices include the following:

Keyboards

The keyboard uses a key arrangement similar to that of an ordinary typewriter, with the addition of some special function keys and a numeric keypad.

Mouse

When using a mouse, one is able to move the cursor around the screen with speed and simplicity. Most have two buttons, which will execute commands according to an application's control instructions.

Scanners

A scanner reads information from paper, and transfers this as text or graphics onto a PC where it is stored and can be edited.

Modems

Modems are expansion cards or external units, which send information from one PC to another via the telephone cables. A modem is necessary if you wish to have access to the Internet.

Light Pens

A light pen transfers graphics information from electronic pads into the computer.

Voice

Voice recognition software translates the spoken word into digital signals, which the computer understands.

Joystick

Similar to a mouse, the joystick also translates physical motion into motion on a computer video display screen.

3.1.3 Output Devices

We have briefly looked at how we put information in the computer with the use of various input devices. Now let's look at how the computer communicates with us.

Monitors

The most common output device used with a desktop computer is the monitor, which is used to display characters and graphics on a screen similar to that of an ordinary television set. Smaller portable computers, such as notebooks and laptops, use liquid crystal display (LCD) screens.

Modem

A modem links two or more computers by translating digital signals into analog signals so that data can be transmitted via telephone lines.

Printers

Another standard output device is the printer. Printers provide us with a paper copy of the PC's result. Various types of printers are available in the market place. Some of there are listed below.

Dot-matrix Printers

Dot-matrix printers have a set of pins, which impact upon the ribbon against the paper, producing varying qualities of print. Modern dot-matrix printers are capable of fairly high quality printout at high speed and are used for the end product in a wide range of commercial environments.

Ink-jet and Bubble-jet Printers

These printers are a successful compromise between dot-matrix and the much higher laser printer quality. It may be as small as and not much more expensive than the dot-matrix printer. The quality is much higher and as an almost silent printer, it has gained enormous popular demand.

Laser Printer

Offering very high resolutions, laser printers suit a wide range of business and media-oriented applications. They are expensive, but often more economical when speed, durability and professional print quality are considered. Laser printers produce extremely high-resolution graphics. Colour options are available, but at a high cost.

3.1.4 Storage Devices

Computers can store data either internally (in memory) or externally (on storage devices)

Internal Storage

There are two areas in a PC where instructions and data can be temporarily stored called memory. The first type of memory is known either as RAM (Random Access Memory) or as DRAM (Dynamic Random Access Memory) while the second type is known as ROM (Read Only Memory).

RAM

RAM comes in the form of silicon memory chips called SIMM's which are mounted directly on the computer's main circuit board or in chips mounted on peripheral cards that plug into computer's main circuit boards. RAM chips consists of switches that are sensitive to changes in electric current. RAM chips hold their stored information of data as long as the circuits receive a constant current flow. The data is lost if the PC is switched off.

RAM chips are upgradeable, that is, can add more.

ROM

ROM chips are also made of silicon. However, all of the switches on these chips are already set. The patterns on the ROM chips form commands, data, or programs that the computer needs to function correctly.

External Storage

External storage devices, such as a hard disk, can physically reside within the computer's casing. However, the drives remain external to the main circuit board. Some of the external devices are listed below.

Hard Disk

The most common external storage device used in a PC is the hard or "fixed" disk. Hard disks are usually fixed in their disk drive cabinets, which contain the electronics needed to read and write data onto the disks' magnetic surfaces. Hard disks cannot be removed.

Removable Disks

As the hard disk is usually a permanent fixture inside the PC's casing, removable disks were originally used to make a copy of information (back-up) or transfer information from one unit to another. The most common removable disk at present is known as a Stiffy Disk.

CD-ROM

Data may be stored on a CD-ROM. The same technology is used as the laser techniques that are used to create audio compact disk. In order to store on a CD-ROM you require a special devices known as a CD-ROM writer.

Magnetic Tapes

High-speed tape drives are used to copy data and information from the hard disk onto removable tapes. The process of copying data from one type of storage device to another is known as "backing up". The storage capacity of a magnetic tape far outweighs that of a stiffy disk and is thus popular when backing up hard disks.

4.0 CONCLUSION

A typical computer system consists of five functional units: Input, Output, Control, Arithmetic/Logic Unit (Central Processing Units) and the Main Memory Units.

5.0 SUMMARY

All other components of the computer system beside the CPU are collectively called peripheral devices or simply peripherals.

SELF ASSESSMENT EXERCISE

1. A mouse is an example of
   (a) Output device (b) Storage device (c) Input device
   (d) Switching devices
2. True of false – High speed tape devices are used to copy data.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the functions of the central processing unit
2. Write a short note on two input devices.
3. Write a short note on two output devices.

7.0 REFERENCES/FURTHER READING

Ayo, C. K. (1998). *Computer Literacy: Operations and Appreciation.* (2nd ed.), Mckay Consult.

UNIT 3 ELEMENT OF A COMPUTER: SOFTWARE

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1.0 Introduction
2.0 Objective
3.0 Main Content
    3.1 Software
        3.1.1 Operating Systems
        3.1.2 Languages
        3.1.3 Language Translators
        3.1.4 Software Generations
        3.1.5 Application Software
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

In unit 2, we discovered the component of a computer called the hardware. Software means computer programs that run on a computer.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- explain the subject software.

3.0 MAIN CONTENT

3.1 Software

So for have looked at the major hardware components of a modern PC. Next we will turn out attention to the software elements of a computer. The software of a computer refers to the computer programs that are used on a computer. What is a program?

A program is a set of instructions that tells the computer what to do. Programs may be divided into two broad categories, namely, Operating Systems and Application Programs.

3.1.1 Operating Systems

An operating system, which is sometimes referred to as the OS, is the software responsible for controlling the allocation and usage of

hardware resources, For example, the allocation of memory, controlling the central processing unit time allowed per task, controlling the amount of disk space used and finally, how the peripheral devices, such as printers, operate. The operating system is the basis on which all computer applications programs, such as word-processing and spreadsheet programs are produced.

There are many different operating systems available in the modern PC world. The system that you are most likely to encounter is one of the versions of the Windows operating system. For this reason, on this course you be introduced to the operating system Windows 98. Although a more recent version of Windows, that is Windows Millennium Edition, or as it is often referred to Windows ME, is available.

The operating systems have the following features:

- They are supplied by the manufacturer of the hardware or purchased as utility from a software company.
- They assist in running other programs.
- They serve as intermediaries between the hardware and application programs.
- They simplify the use of the software.
- They control the operations of the hardware.

The operating systems as defined here include Language translators and utilities or service programs.

The operating system is often called the resource manager or supervisor and the resources to be managed include:

- The processor
- The input/output devices
- The primary memory
- The secondary storage devices

Apart from Windows cited above, examples of operating systems include MS-DOS, PC-DOS, UNIX, XENIX, NT, WINDOWS 95, 98, 2000

3.1.2 Languages

The hierarchies of the languages are as follows:

1. Machine Language
2. Low-level Language
3. High-level Language

The machine language consists of series of binary numbers (digit consisting of zero (0) one (1)) which is the languages the computer understands. A low-level languages is a machine-oriented language consisting of symbolic codes in which instructions correspond or resemble machine languages and it depends on the machine e.g. Assembly Language.

A high level language is a problem-oriented language which is a restricted form of the natural languages. Such languages include BASIC (Beginners All Purpose SymbolicInstruction Code), FORTRAN (Formula Translator). COBOL (Common Business Oriented Language), ALGOL (Algorithmic Language), PL/1 (Programming Language 1), RPG (Report Program Generator), PASCAL, C etc.

3.1.3 Language Translators

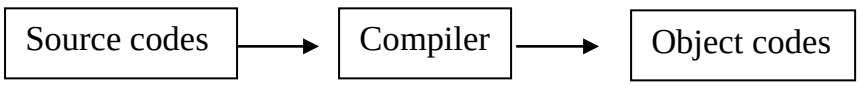
A language translator translates high-level languages to the language of the computer. A language translator could be any of the following:

(i) Interpreter

An interpreter is a program which translates the sources program into machine language statement by statement. It translates a statement and executes before taking on the next statement.

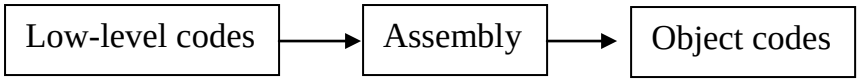
(ii) Compiler

This is a program that translates the whole source program into machine code or language. It accepts the whole source program as input and produces the object program which is the translated version of the sources program as output before executing the program.



(iii) Assembler

This is a program that translates programs written in assembly languages into machine code.



(iv) Emulators

Emulators are special programs that permits the object program generated on one computer to be executed on an entirely different computer.

3.1.4 Software Generations

Software generations refer to the developmental stages of the programming languages. They are as follows:

(a) **First Generation:** This is the forerunner of all programming languages consisting of binary digits (0,1). This is the machine language. The generation is the late 40's.

(b) **Second Generation:** This is the assembly language (low-level language) consisting of abbreviated word (pneumonics). The generation is early 50's.

(c) **Third Generation:** This consists of the high level languages where programming is done in languages. The generation is the late 60's.

(d) **Fourth Generation:** This is an application generation that automates the routines involved in programming and its features include:

(i) Setting up data entry screens
(ii) Creating files
(iii) Querying data
(iv) Report generation.

Examples of fourth generation software are the data base packages (D base), spreadsheet and graphics packages.

(e) **Fifth Generation:** They are declarative languages where programmers state the problem and the languages sort out the solution. Such systems are called expert systems.

Examples are Turbo PROLOG (Programming in Logic) and LISP (List Processing).

3.1.5 Application Software

As you learned earlier, computer software contains instructions that are processed and executed by a PC. Application software is the software

that actually addresses user's specific needs. In the business world of today, you will find four major application categories. These are:

- Word-processing
- Spreadsheets
- Presentations
- Databases

User software is also included in the application software. A user software is also included in the application software. A user software is a program developed by the user personally or by commissioned agents. Such programs are directed towards solving the user's specific. The scope of such programs varies from one user to the other.

SELF ASSESSMENT EXERCISE

Answer True or False

1. Storage is a term commonly applied to storage devices.
2. A computer is a program.

4.0 CONCLUSION

Other resources of a computer that are not hardware are often referred to as the software.

5.0 SUMMARY

The software and hardware components of a computer complement each other.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is the function of a program?
2. What is the function of the operating system?

7.0 REFERENCES/FURTHER READING

Ayo, C. K. (1998). *Computer Literacy: Operations and Application.* (2nd ed.). Mckay Consult.

UNIT 4 HOW TO WORK WITH A COMPUTER: SWITCHING ON AND OFF THE PC

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Switching On Your PC
    3.2 Turning Off Your PC
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

In this unit you will learn how to switch on and turn off your PC.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- switch on your PC
- turn off your PC.

3.0 MAIN CONTENT

3.1 Switching on Your PC

In order that you may use a PC, the first task you must perform is to switch on (or boot) the PC. To switch the PC on first ensure that the power cable, which is supplied with your PC, is connected to the electrical mains supply to your computer.

The On/Off power switches fitted to modern desktop and mini tower computers, are generally of the toggle switch type and are located on the front of the computer casing. A small LCD is situated adjacent to the power switch. When the power switch has been turned on, the LCD will light up and a cooling fan, located in the PSU will start, indicating that the computer is receiving electricity from the mains supply.

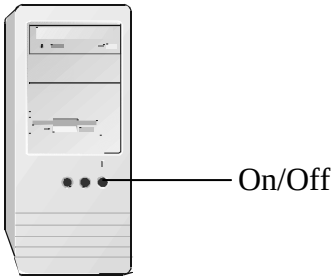


Figure 1.1: Front view of computer casing

Monitors, generally receive power directly from the computer, with a power cable connecting the PSU to the back of the Monitor. The monitor toggle power switch will be found either on the front or on the side of the monitor. Once you have turned on the computer, if the monitor is already switched on, a small indicator light near the monitor on/off switch will become illuminated. If the light remains off, push the monitor power switch to turn it on.

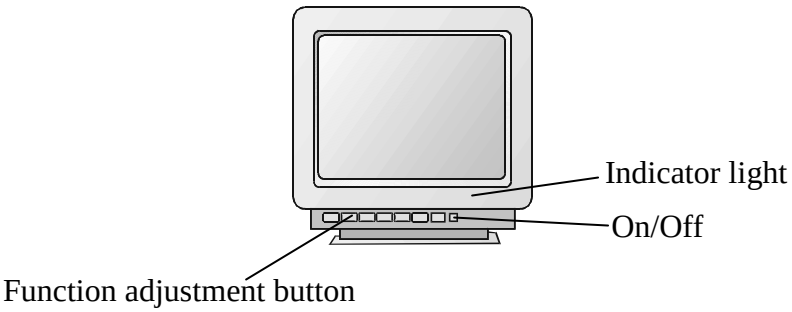


Figure 1.2 Monitor Power Switch

Start up sequence

When turning on your PC, the following sequence of events will take place.

1. The PC will perform some standard systems checks covering areas such as:

- Motherboard
- Processor
- Memory and
- Disk Drives

2. The message “Starting Windows ‘98” will be displayed on your monitor, followed by the Windows ‘98 logo.

3. After a few seconds, the Windows 98 desktop will be displayed.

One of the first checks the system will perform is to check the available base memory your system has at its disposal. You will see a message similar to the following appear on screen whilst this check is in progress.

Figure 1.3 Memory Check

The removable disk indicator light will briefly glow as the disk drives are checked before the hard disk is checked. Then the screen will display system information in accordance with the components and setting that the system has located during its tests. The screen will appear similar to the shown below.

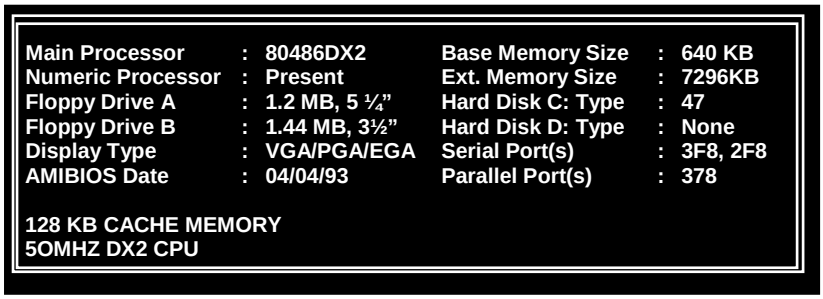


Figure 1.4: System Information

It is at this point that the computer has completed the majority of its hardware checks. If there are any errors found during these checks the system will indicate the fault either on screen or with a series of beeps. Now the computer is ready to load an operating system. Window 98 is loaded automatically. When complete, the Windows 98 desktop will be displayed.

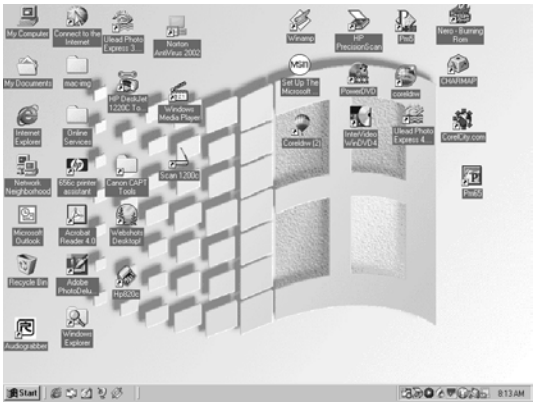


Figure 1.5: The Window 98 desktop

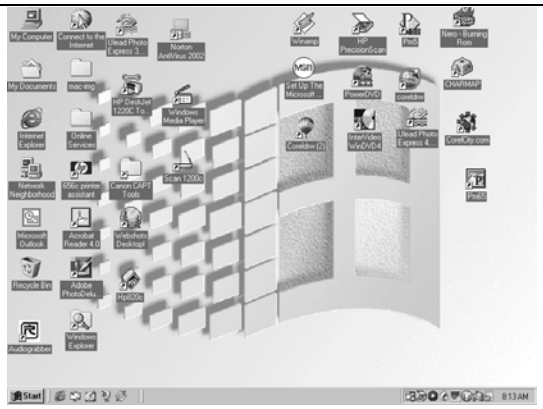
Although the most current version of the Window operating systems is Windows Millennium, the majority of copies of Windows currently in use, that is at the time of going to print, is Windows 98. For this reason will look at the WINDOWS ’98 operating system on this course. You will learn about Windows in more detail later.

SELF ASSESSMENT EXERCISE 1

Switching on and Loading Windows 98

Before you begin: Ensure that your PC is currently switched off

What you do	***Comments/Prompts***
1. Switch on your computer system	*After a few moment, the system will perform the standard system check* *Next you will see:* *“Starting Window 98…”* *The screen will temporarily go black before displaying the Windows ’98 desktop*

	
2. Observe the Windows '98 Desktop	*Locate the following elements:* *"My Computer", "Recycle Bin". "Taskbar" and the "Start Button".*

3.2 Turning off Your PC

Before you turn off your computer, it is important that you shut down Windows 98 correctly. One of the methods of shutting down Windows '98 is accomplished by holding down the **<Alt>** key and pressing the **<F4>** function key at the same time.

A "Shut Down Windows" dialogue box will appear which contain a list of choices relevant to closing Windows. The standard default dialogue box lists the following choices:

Figure 1.6: The Shut Down Windows dialog box

The options listed in Figure 1.6 above are in the form of "radio" buttons, which means only one option can be selected at a time. Once you have

selected the required option by using the UP < - > arrow or the DOWN < ¯ > arrow on your keyboard, you will press (ENTER) key, which will activate the selected command button. Windows '98 will now perform the relevant routine.

Shut Down

This shuts down windows and displays the messages "It is now safe to turn off your computer". When this message appears on the screen you can safely switch off your computer.

Restart the Computer

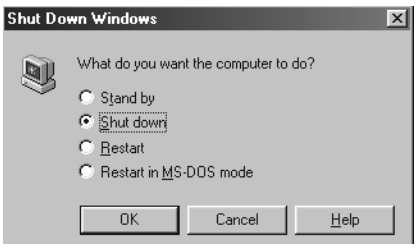
This option reboots (restarts) your computer and loads Windows '98. This option is used when system settings have been changed. In order for Windows to recognize the new settings, Windows must reboot.

Restart the Computer in MS-DOS mode

Should you wish to run your PC in MS-DOS mode this option is used to restart your computer in DOS mode.

SELF ASSESSMENT EXERCISE 2

Shutting Down Windows and your PC

What you do	***Comments/Prompts***
1. Press and hold down the <Alt> key Press and release the <F4> function	*The following Shut Down Windows dialog box is displayed*  *The Shut down option is pre-selected*
*2. Press <**Enter**>*	*After a few moments a message appears on your monitor, informing you that is safe to turn off your company*
*3. Either press the reset button on the front of your PC, or press <**CTRL**> + <**ALT**> + <**DEL**> keys*	*You have just performed a soft boot. After a few moments, the Windows desktop is displayed.*

4.0 CONCLUSION

In this unit, you learn how to switch off your PC and how to turn on your PC.

SELF ASSESSMENT EXERCISE 1

Boot is another term for switch on. Answer Yes or No.

5.0 SUMMARY

Here you are introduced to the rudiments of starting and closing a computer.

6.0 TUTOR-MARKED ASSIGNMENT

What happens to data currently held in RAM when the PC is switched off?

7.0 REFERENCES/FURTHER READING

Ayo, C. K. (1998). *Computer Literacy: Operations and Application.* (2nd ed.). Mckay Consult.

UNIT 5 USING A MOUSE

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Using a Mouse
        3.1.1 Basic Mouse Techniques
        3.1.2 Using the Mouse to Draw a Picture
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

A mouse is another input device which you will use to give your computer instructions. In this unit we will look at how a mouse works and then we will look at the basic techniques of how to use a mouse.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- use a mouse to give your computer instructions
- use a mouse to draw a picture.

3.0 MAIN CONTENT

3.1 Using a Mouse

The mouse became popular by its inclusion as standard equipment with the early Apple Macintosh. With the increased popularity of GUI's (GRAPHICAL USER INTERFACE), the use of the mouse has grown throughout the personal computer and workstation worlds.

The basic features of a mouse are a casing, which has a flat bottom and is gripped by one hand. With one or more buttons on the top, the mouse has a multidirectional detection device, which is usually a ball on the bottom, and cable connecting the mouse to the computer.

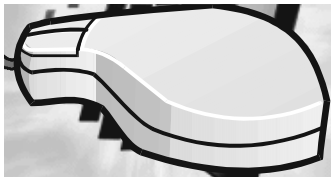


Figure 1.7 Typical two button mouse

By moving the mouse on a flat surface (such as a desk or mouse pad), the ball turns inside the mouse, moving two sets of rollers that control an on-screen cursor.

A mouse is classed as a relative pointing device because there are no defined limits to the mouse's movement and because its placement on a surface does not map directly to a specific screen location. To select items or choose commands on the screen, the user presses one of the mouse's buttons, which produces a "mouse click"

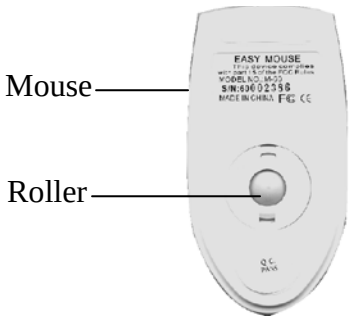


Figure 1.8: Mouse ball and rollers

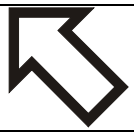
3.1.1 Basic Mouse Techniques

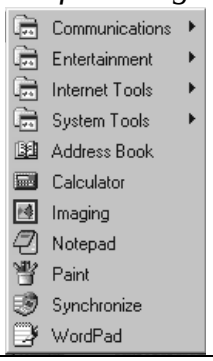
To use a mouse is relatively easy, but like most things, "practice makes perfect". The following list details the basic mouse and cursor movements:

Mouse Movement	***Cursor Movement***
Push the mouse away from you (from the front to the back of the desk)	*The cursor will move to the top of the screen*
Pull the mouse toward you (from the back to the front of the desk)	*The cursor will move to the bottom of the screen*
Slide the mouse to the right	*The cursor will move to the right of the screen*
Slide the mouse to the left	*The cursor will move to the left of the screen*

SELF ASSESSMENT EXERCISE 1

Using the Mouse to Launch a Program

What you do	***Comments/Prompts***
1. Start your computer and wait until WINDOWS loads and the desktop is displayed.	
2. Locate the mouse pointer on the screen, it is a small white arrow	
3. Slide the mouse away from the front of the desk toward the back of the desk. As you do this watch the pointer on the screen.	*The mouse pointer will move towards the top of the screen*
4. Slide the mouse in any direction of your choice (remember to keep it on a flat surface). As you do this watch the pointer on the screen.	*The mouse pointer will move in accordance with your instructions.*
5. Next we will practice single clicking. Move the pointer until it is positioned on the Program Icon titled "My Computer". Click the left mouse button once.	*The "My Computer" icon will become selected (The icon and title will become highlighted).* 
6. Repeat the above process selecting another Program icon of your choice (remember to click once).	*The program icon you selected will become highlighted.* *Next you will use the Start button on open the Paint game.*
7. Positioned in the bottom left-hand corner of the desktop is the Start button. Click once on this button. 	*The start menu is displayed, which should look similar to the following example:*

	
8. *Position your mouse pointer on the menu items named Programs.*	*A sub-menu is displayed, similar to the following diagram:* 
9. *Position your mouse pointer on the Menu item named Accessories*	*A further sub-menu is displayed, similar to the following diagram:* 
10. *Select and click on the menu item named Paint.*	*The Paint program is displayed, similar to Figure 1.9*

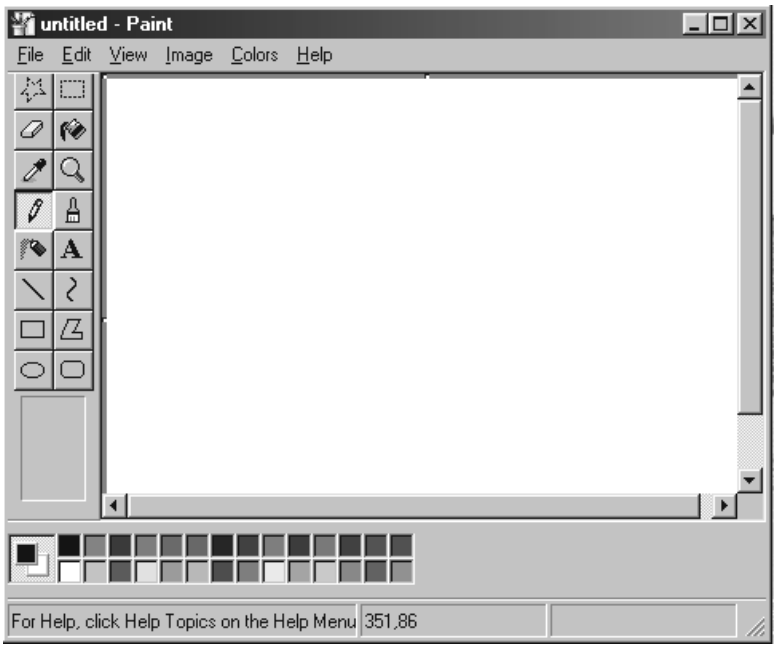


Figure 1.9: The Paint Window

3.1.2 Using the Mouse to Draw a Picture

The next exercise will afford you the opportunity to use the mouse to draw the picture illustrated below.

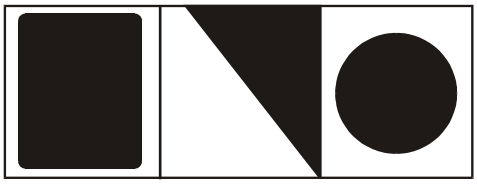


Figure 1.10

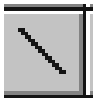
SELF ASSESSMENT EXERCISE 2

Using the Mouse to Draw a Picture

Objective: To draw the picture illustrated in Figure 1. 10 above

What you do	Comments/Prompts
1. Position the mouse printer on the centre of your screen. Observe the shape of the mouse pointer.	The mouse pointer changes to the shape of a pencil.
2. Locate the rectangle tool on the drawing toolbox on the	The screen tip reads “rectangle”

	left side of the screen. 	
3.	Position the mouse pointer on the rectangle tool. Click the left mouse button on the Rectangle tool. Position the mouse pointer in the centre of the screen.	The mouse pointer has changed shape to a cross-community referred to as “cross-hairs”
4.	Look at the bottom of the window on the status bar. You will notice two number separated by a comma.	The first number indicates the horizontal position of the mouse pointer on the screen, while the second number indicates the vertical position of the mouse pointer on the screen.
5.	Move the mouse pointer around on the screen and notice how the numbers change accordingly.	The screen is divided into invisible dots called “pixels”. These numbers refer to the pixel number that the mouse pointer is positioned on.
6.	Please position the mouse pointer so that the pixel numbers are approximately **50,100**	

7.	Press and hold down the left mouse button. You will notice that another set of numbers has appeared to the right of the pixel indicators.	These numbers represent the size of the rectangle.
8.	While pressing down the mouse button move the mouse down and to the right until the size indicators are approximately **450 x 175** Release the mouse button.	It does not matter if the numbers vary slightly. Use Figure 1.10 above as a reference.
9.	Select the **Line** tools on the drawing toolbox by positioning the mouse pointer over the tool and clicking the left mouse button once. 	
10.	Position the mouse on the top line of the rectangle that you	The objective of this step is to position the mouse pointer

have drawn so that the pixel indicator reads **200,100**	approximately one third along the top line of the rectangle. If necessary adjust the position of your mouse pointer accordingly.
11. Press and down the **<Shift>** key on the keyboard. While holding down this key, press and hold down the left mouse button and draw the line from the top of the rectangle to the bottom of the rectangle.	If you hold down the **<Shift>** key while drawing a line, it will be straight.
12. Position the mouse on the top line of the rectangle that you have drawn so that the pixel indicator reads **350,100**	The objective of this step is to position the mouse pointer approximately two thirds alone the topline of the rectangle. If necessary adjust the position of your mouse pointer accordingly.
13. Press and down the **<Shift>** key on the keyboard. While holding down this key, press and hold down the left mouse button and draw the line from the top of the rectangle to the bottom of the rectangle.	The original rectangle has been divided into three equal boxes.

14. Locate the rounded rectangle tool on the drawing toolbox on the left side of the screen. 	The screen tip reads “rounded rectangle”.
15. Position the mouse pointer on the rounded rectangle tool. Click the left mouse button on the rounded rectangle tool.	The screen tip reads “rounded rectangle”.
16. Position the mouse pointer in the first of the three boxes of the rectangle, that is, the left most box.	
17. Position the mouse so that the pixel Indicator reads **60,110**	
18. While pressing down the mouse button move the mouse down and to the right until the size indicators are approximately **130 x 155.** Release the mouse button.	The rounded rectangle appears in the first box.

19. Locate the ellipses tool on the drawing toolbox on the left side of the screen. 	The screen tip reads “ellipses”.
20. Position the mouse pointer on the ellipses tool. Click the left mouse button on the ellipse tool.	
21. Position the mouse pointer in the last of the three boxes of the rectangle that is, the rightmost box.	
22. Position the mouse so that the pixel indicator reads **370,130**	
23. Hold down the **<Shift>** key. While holding down the **<Shift>** key, press down the mouse button and move the mouse down and to the right until the size indicators are approximately **111 x 111.** Release the mouse button.	The circle appears in the third box. The <Shift> key ensures that a perfect circle is drawn.
24. Locate the Line tools on the drawing toolbox on the left side of the screen 	The screen tip reads “Line”.
25. Position the mouse pointer on the Line tool. Click the left mouse button on the Line tool	
26. Position the mouse pointer On the middle box of the three boxes of the rectangle	
27. Position the mouse so that the pixel indicator reads **200,100**	
28. Press and hold down the left mouse button. Drag the mouse down to the opposite lower right corner of the centre box. Release the mouse button.	The size indicator should read approximately **150 x 175**
29. Locate the Fill with Colour tools on the drawing toolbox on the left side of the screen	This tool enables you to fill a drawn object with the colour of your choice

	
30. Position the mouse pointer on the Fill with Colour tools. Click the left mouse button on the tool.	Next you will select the colour of your choice.
31. Position the mouse pointer on the colour of your choice on the colour palette at the bottom of the screen. 	
32. Click the left mouse button on the colour of your choice	Not black or white please!.
33. Position the mouse pointer inside the rounded rectangle that you drew in the first of the three boxes.	Notice that the mouse pointer has changed shape to that of a bucket of paint.
34. Click the left mouse button once	The object is filled with the colour of your choice. Next, you will fill the two triangles that appear in the centre box.
35. Position the mouse pointer on the colour of your choice on the colour palette at the bottom of the screen	
36. Click the left mouse button on the colour of your choice.	Not black or white please!
37. Position the mouse pointer inside the lower triangle that you created in the centre box of the rectangle.	Notice that the mouse pointer still has the shape of a buckler of paint.
38. Click the left mouse button once. Next you will fill the remaining triangle.	The object is filled with the colour of your choice.
39. Position the mouse pointer on the colour of your choice on the colour at the bottom of the screen.	
40. Click the left mouse button on the colour of your choice	Not black or white please!
41. Position the mouse pointer inside the upper triangle that you created in the centre box of the rectangle.	Notice that the mouse pointer still has the shape of a bucket of paint.

42. Click the left mouse button once.	The object is filled with the colour of your choice. The last object to be filled is the circle.
43. Position the mouse pointer on the colour of your choice on the colour palette at the bottom of the screen.	
44. Click the left mouse button on the colour of your choice	Not black or white please!
45. Position the mouse pointer inside the circle that you created in the right box of the rectangle.	Notice that the mouse pointer still has the shape of a bucket of paint.
46. Click the left mouse button once.	The object is filled with the colour of your choice.
47. Compare your picture to Figure 1.10 on page 18	If it looks similar – well done! You have learned to use the mouse. Next you will exit the Paint program.
48. Click on **File** on the menu bar	The File menu is displayed
49. Click on **Exit**	You will be asked whether you wish to save changes to untitled?
50. Click on the **No** button	The Paint program is closed and you are returned to the Windows desktop.

4.0 CONCLUSION

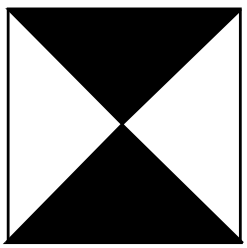
A mouse is used to give instructions to a computer.

5.0 SUMMARY

Here you learned the use of a mouse and the basic techniques of how to use a mouse.

6.0 TUTOR-MARKED ASSIGNMENT

Explain how you will use a mouse to draw the following picture:



7.0 REFERENCES/FURTHER READING

Gottfried, B. S. (1994). *Programming with Pascal (Schav's Series)* (2nd ed.).

MODULE 2

Unit 1 Operating System
Unit 2 Windows 98
Unit 3 Files
Unit 4 Word Processing
Unit 5 Further Word Processing Program Facilities

UNIT 1 OPERATING SYSTEM

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 What is an Operating System?
        3.1.1 Basic Windows Functions
    3.2 Loading the Operating System Window 98
    3.3 Windows 98
        3.3.1 Elements of the Desktop
        3.3.2 Windows Terminology
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

The Operating System provides facilities that enable other programs to use the hardware in a safe and controlled way.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- learn what is meant by the operating system
- load the operating system windows
- be introduced to Windows 98
- explore the general characteristics of a window.

3.0 MAIN CONTENT

3.1 What is An Operating System?

An operating system is the software responsible for controlling the allocation and usage of hardware resources. The operating system is the basis on which all computer application programs are produced.

3.1.1 Basic Windows Functions

The windows operating system enables users to perform the following functions:

- Run programs
- Run multiple programs simultaneously
- Control Printers
- Format Disks
- Copy of Move files
- Organise the storage area on the computer
- Share information across a network

3.2 Loading the Operating System Window 98

In Module 1 you learned that to load Windows 98, you simply turn on your PC and the operating system will load automatically. To recap, the startup sequence of events is as follows:

The PC will perform some standard system checks covering areas such as:

- Motherboard
- Processor
- Memory and
- Disk Drives
- Next the message “Starting Windows 98…” will be displayed on your monitor, followed by the Windows ’98 logo.
- After a few seconds, the Windows ’98 desktop will be displayed. The desktop is the main working area where you will perform the majority of functions when using Windows ’98.

SELF ASSESSMENT EXERCISE 1

Switching on and Loading Windows 98

Before you begin: Ensure that your PC is currently switched off

What you do	Comments/Prompts
1. Switch on your computer system	After a few moments, the system will perform the standard system checks. Next you will see: "Starting Windows 98" The screen will temporarily go black before displaying the Windows '98 desktop.

3.3 Windows 98

When starting Windows '98 you are presented with the Windows '98 desktop. The desktop is the key to all actions performed within Windows '98. When using Windows '98, you will see that every action performed in the operating system normally begins at the desktop.

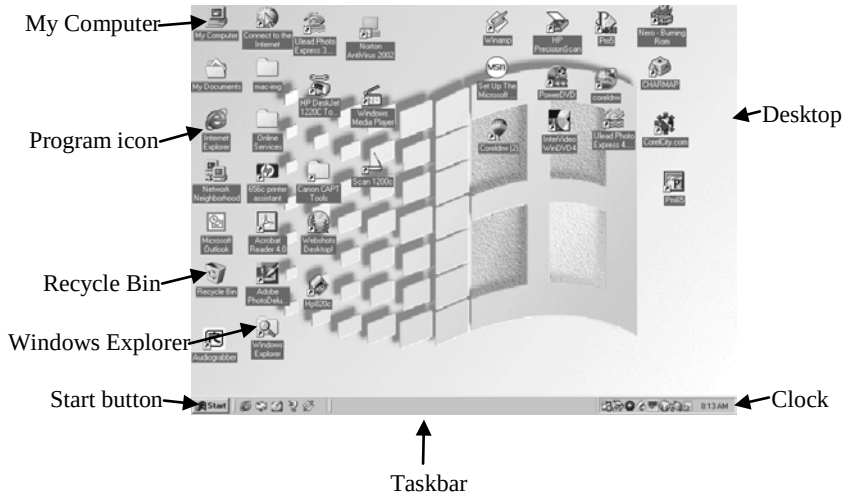


Figure. 2.1 The Windows '98 Desktop

3.3.1 Elements of the Desktop

The desktop is fully customizable; however the basic desktop layout contains the following standard elements:

Taskbar The Taskbar provides quick access to information and to applications which are active (opened). The default location for the Taskbar is at the bottom of the

desktop. The Taskbar also contains a clock, which is displayed in the right hand corner.

Start button/menu The Start button is located at the far-left corner of the taskbar (when the taskbar is in the default location). The Start button opens a menu, referred to as the Start menu. This menu enables users to open documents, launch programs, and perform other common tasks.

Desktop The Desktop is the main area of the screen where the Program Icons and Shortcuts are displayed.

Program Icon Program Icons are used by the operator to launch (run) the relevant program. Program icons and shortcuts can be placed anywhere on the desktop:

Shortcut A Shortcut gives the operator quick and easy access to frequently used programs or information. The Shortcuts are placed on the desktop.

My Computer This utility provides quick and easy access to information related to your computer, such as drives, files and folders.

Recycle Bin All files deleted from your PC are stored in the Recycle Bin. This enables files to be easily undeleted.

Inbox If you are using electronic mail (e-mail) the inbox will be displayed. All incoming messages are stored in the Inbox.

3.3.2 Windows Terminology

When working with Windows, certain terms and terminologies are used to describe processes and concepts. Table 1 below describes some of these terms.

Terminology	Description
Application	This refers to either a Windows or MS-DOS program
Folder	This is the new name for a directory
Icon	A small picture that represents either a programme or a shortcut
Mouse	This is the pointing device which you will use constantly whilst performing tasks in windows

	'98
Shortcut	An icons placed on the desktop, which enables quick and easy access to programs and data.
Shortcut menu	These menus list various applicable shortcuts.
Shutdown	Process followed when closing windows
Start button	The Start button opens a menu, referred to as the Start menu.
Start menu	This menu enables users to open documents, launch programs, and perform other common tasks.
Taskbar	The Taskbar provides quick access to information and to applications which are active (opened).
Window	A rectangular box that contains icons or data (information).

4.0 CONCLUSION

Operating systems assist in running other programs. They serve as intermediaries between the hardware and the user programs.

5.0 SUMMARY

Operating systems control the operations of the hardware.

6.0 TUTOR-MARKED ASSIGNMENT

Give a brief explanation of the functions associated with the windows operating system.

7.0 REFERENCES/FURTHER READING

Ayo, S. K. (1998). *Computer Literacy: Operating Systems and Applications.* (2nd ed.). McKay Consult.

UNIT 2 WINDOWS 98

CONTENTS

1.0 Introduction
2.0 Objective
3.0 Main Content
    3.1 Examining the Start Menu
    3.2 Windows Elements
    3.3 Moving and Sizing a Window
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Windows consist of sets of standard operations which can be used by the higher level software to interact with graphical user interface (GUI).

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- explore further the characteristics of Windows ’98.

3.0 MAIN CONTENT

3.1 Examining the Start Menu

As discussed earlier, the Start button is located on the taskbar and when you click on it the Start menu is displayed. This is Windows 98’s main menu. The standard options are shown below:

Figure 2.2 The Start Menu

Programs The Programs option provides quick access to the various applications that are installed on your computer

Favourites This option allows you to quickly open a favourite file, folder or website.

Documents The Documents option lists the last 15 opened documents. Documents can be reopened from the list by simply clicking on the relevant filename.

Settings The Settings option allows you to change various system and Windows settings.

It also allows you to set up new printers or view information about the documents(s) being printed.

Find The Find option allows you to search through your system for a particular file.

Help The help option provides access to the Window 98 online Help system.

Run The Run option allows you to run a particular application, such as a setup program, from the command line.

Log Off This option is used to log off your computer so that another individual using Window 98 with different settings can log on.

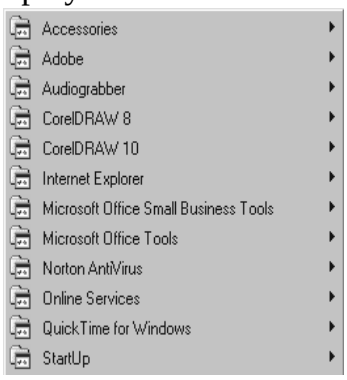
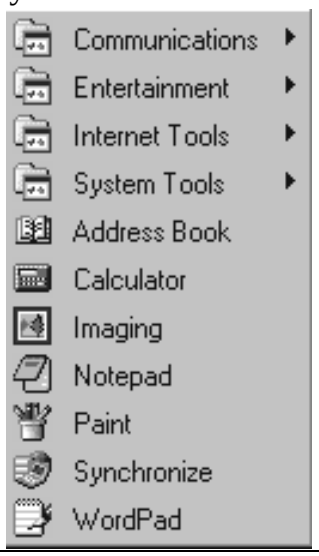
Shut Down The Shut Down option is used to either shut down or restart the computer.

SELF ASSESSMENT EXERCISE 1

Exploring the Start Menu

Before you begin: Ensure that the Windows `98 desktop is displayed

What you do	Comments/Prompts
1. Click the **Start** button on the Taskbar 	The Standard menu is displayed. 

2. Using your mouse, point to the **Programs** option on the menu.	The following Programs submenu is displayed.  **NOTE:** The submenus on your screen may differ slightly.
3. Point to Accessories (found on the Programs submenu)	The Accessories submenu is displayed. 
4. Point to the **System Tools** option (on the Accessories submenu).	The System Tools submenu is displayed 
5. Now point to the **Documents** option (on the Start menu).	The most recently opened document names are listed (maximum 15).

6. Point to the **Settings** option (on to (Start menu).	The Settings submenu is displayed.
7. To turn off any menu simply point to any blank area of the desktop and click the primary mouse button.	All menus are closed and you are returned to the Window ’98 desktop.

3.2 Windows Elements

When working in Windows 98, you will work in rectangular areas of all different shapes and sizes. These areas are called windows. Even though the windows on your computer will vary in appearance, you will find that virtually all of the windows consist of similar elements. Figure 2.3 below represents a typical window.

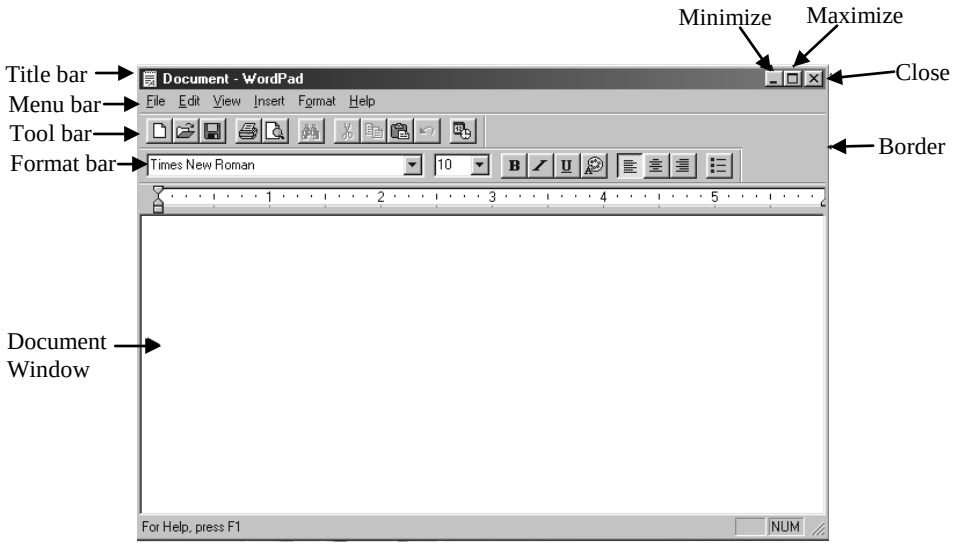


Figure 2.3 Sample Window

Title bar The title bar displays the title of the relevant application. If you maximise a document in an application window, the name of the documents will also appear next to the name of the application title in the title bar. You can also use the title bar to move a window.

Close button The close button is used to close the window and exit from the application.

Maximize button This button is used to display a full-screen view of the window.

Restore button The restore button is only available if a window has been maximized and is used to restore the window back to its original size.

Minimize button This button is used to minimize the window, reducing it to a button on the Taskbar (the application remains running in the background).

Menu bar The menu bar displays the primary commands of the relevant application. Selecting one of these commands displays a menu of command options from which you can make additional selections.

Toolbar This bar displays shortcut button for performing common operations, such as saving a file and copying data.

Format bar This bar also displays shortcut buttons as well as various boxes for performing formatting operations, such as text alignment, changing the font and font size.

Document window The document window is the rectangular area, which occupies the majority of the screen. This is the area in which you work whilst in an application.

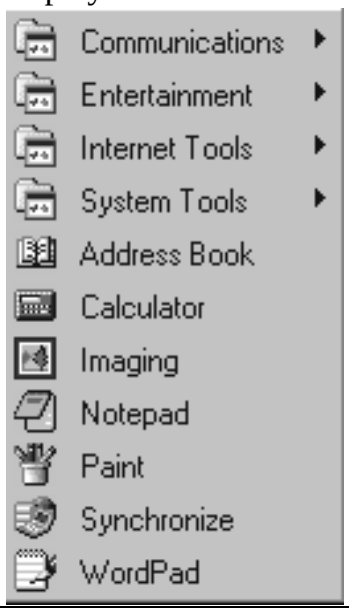
Status bar This bar displays messages and other information as you use the application.

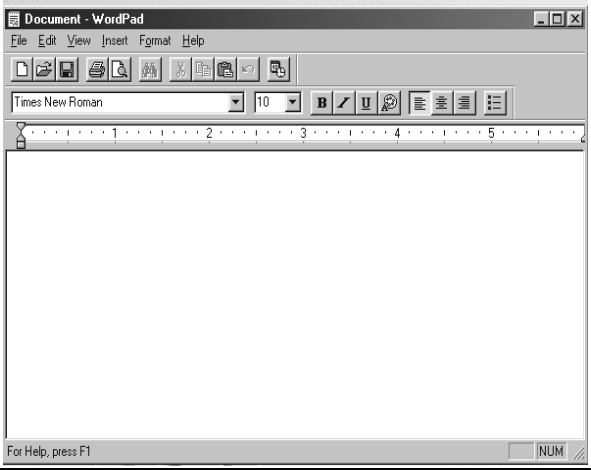
SELF ASSESSMENT EXERCISE 2

Exploring a Window

Before you begin: Ensure that the Windows 98 desktop is displayed
Objective: To launch an application called WordPad and experiment with some of its window elements.

What you do	Comments/Prompts
1. Click the **Start** button on the Taskbar.	The standard Start menu is displayed. 

2. Using your mouse, point to the **Programs** option on the menu. **NOTE:** The submenus on your screen may differ slightly.	The following Programs submenus is displayed. 
3. Point to Accessories (found on the Programs/submenu).	The Accessories submenu is displayed 
4. Click on the WordPad icon. 	The WordPad application will be launched and a window similar to the one below will appear on your screen.



5. Identify the windows elements that we have just discussed.	Use Figure 2.3 on page 35 if necessary

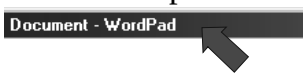
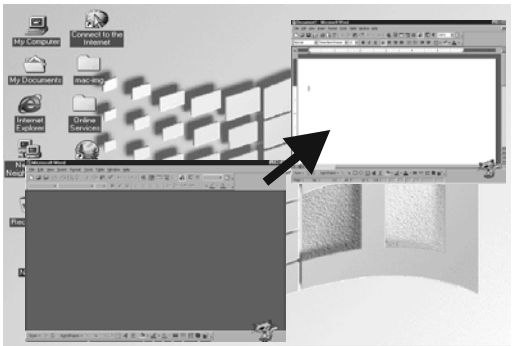
3.3 Moving and Sizing a Window

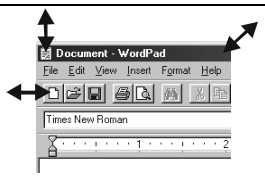
A window may not always appear in the most suitable location on the screen. It may also not be the correct shape and/or size. It is possible to move and/or resize a window.

SELF ASSESSMENT EXERCISE 3

Move and Size a Window

Before you begin ensure that WordPad is still open on the desk.
Objective: To move and change the size of the current window.

What you do	**Comments/Prompts**
1. Click on the title bar of the window and use the drag & drop method to move the window to another position on the desktop. 	The window will be displayed in the new location. 
2. Position your mouse pointer on the border, which is located around the edge of the window.	You will notice that your cursor shape will change to a double-headed arrow when the cursor is placed over the border.

	
3. Click and drag the border of the window until you have resized the window to any size you like, then release your mouse button.	The window size has been changed.
4. First we are going to minimize the WordPad window. To do this we simply click on the minimize button of the active window.	The WordPad window will become minimized and appear in the form of a button on the Taskbar. 
5. Now we will restore the WordPad window. Click on the WordPad button which is found on the Taskbar.	The WordPad window is restored to its original size.
6. Now let's maximize the WordPad window. To do this click on the maximize button of the active window.	The WordPad window has now been maximized and fills the screen. You will notice that the desktop is not visible and that the maximize button has been replaced by the restore button.
7. To restore the window to its original size, click on the Restore button	The WordPad window is now returned to its original size.
8. Click on the close button	The WordPad window is closed.

4.0 CONCLUSION

Working on Windows 98 involves working in rectangular areas at different shapes and sizes which are called windows.

5.0 SUMMARY

You now know how to explore the start menu of Window 98 and you can explore the entire window.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss main characteristics of Windows 98.

7.0 REFERENCES/FURTHER READING

C. S. French (2000). *Computer Science.* (5th ed.) Ashford Colour Press Gosport, Hants.

UNIT 3 FILES

CONTENTS

1.0 Introduction
2.0 Objective
3.0 Main Content
    3.1 File Handling
    3.2 Creating a New Folder
    3.3 Shutting Down Window ’98
4.0 Conclusion
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1.0 INTRODUCTION

Each document is stored in a computer individually by name in what is called a file.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- handle a file.

3.0 MAIN CONTENT

3.1 File Handling

All information found in a computer that is both data and programs, are stored in files. Folders are used to hold related files, as well as other related folders.

In many ways, Window 98 folder can be compared to a paper folder in that both are used to store and organise information in one location.

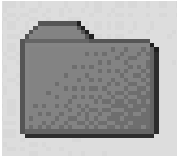


Figure 3.1 A Folder Icon

3.2 Creating a New Folder

Before we can use a folder we must first create it.

To create a new folder:

- Double-click on the **My Computer** icon on the desktop
- In the **My Computer** window, open the relevant drive icon.
- In the drive window, select (from the menu) the **File**, **New** command, followed by **Folder**.
-

- Type a new name for the folder and press **<ENTER>**.

SELF ASSESSMENT EXERCISE 1

Creating a New Folder

Before you begin: Ensure that you have no open windows on your desktop.

What you do	***Comments/Prompts***
1. Locate **My Computer** on your and open it by double-clicking the icon.	
2. Locate and Double-click on the Drive **A:** icon.	The Drive A: window will be displayed.
3. Using the menu, click on **File, New** command and choose **Folder.**	In the "Drive A:" window a New Folder icon will be displayed.
4. Type in the folder name (we will call this one **"Test Folder"**) and press**<Enter>.**	The new folder has a name.

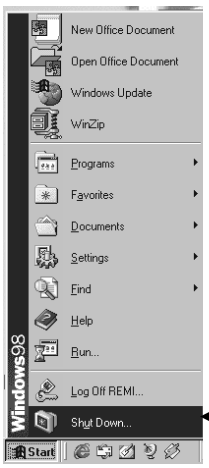
3.3 Shutting Down Window '98

In Module 1 you learned the importance of shutting down Windows correctly. If necessary please refer to Module 1. The method that you learned in Module 1 was to use the key combination of **<Alt>** plus

<F4>. You will end this lesson by shuttting down Windows 98 using an alternative method.

SELF ASSESSMENT EXERCISE 2

Shutting Down Windows and your PC

What you do	Comments/Prompts
1. Click the **Start** button on the Taskbar 	The standard Start menu is displayed. 
2. Select **Shut Down** from the start menu	The Shut Down Windows dialog box is displayed.
3. Ensure that **Shut Down** is selected and press **<Enter>**	After a few moments, a message appears on your monitor, informing you that is safe to turn off your

4.0 CONCLUSION

Many document files take the form of a formatted sequence of characters.

5.0 SUMMARY

Document files that take form of formatted sequence of characters are called text files because they consist of printable characters organised into lines of text.

6.0 TUTOR-MARKED ASSIGNMENT

Explain how to create a new folder.

7.0 REFERENCES/FURTHER READING

French, C. S. (2000). *Computer Science* (5th ed.) Gosport, Hants: Ashford Colour Press.

UNIT 4 WORD PROCESSING

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Introduction to Word Processing
        3.1.1 Starting Word
        3.1.2 Exiting from Word
    3.2 Creating a New Blank Document and the Basics of Entering Text
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        3.3.4 Nonprinting Characters
4.0 Conclusion
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1.0 INTRODUCTION

A word processing program allows the user to create, edit, format, store and print text documents.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- use Microsoft Word 2000
- exit the Word 2000 program
- create a new blank document
- enter text
- identify nonprinting characters.

3.0 MAIN CONTENT

3.1 Introduction to Word Processing

Word processing is the use of computers to create, revise, and save documents for printing and future retrieval. You enter information into the computer by using a keyboard. As you type, your words are displayed on a monitor, or screen, and are stored in computer memory rather than on paper.

Because typing information is a separate task from printing it, word processors enable you to change information easily without retyping entire documents. For example, you can change margins, add and delete text, move paragraphs, and correct spelling errors. All revisions are made within the computer and are then saved on a disk and printed.

3.1.1 Starting Word

To use Word, you must load the program from the hard disk into the computer's memory. You can store your data files (documents) in a folder on the hard drive, or on a floppy disk. In order to use Word, you need to have Microsoft Windows 95, 98, Millennium Edition or NT 4.0 installed on your computer.

To start Word using the Start menu:

1. Turn on your computer
2. In the Taskbar, click on **Start**
3. Choose the **Programs** menu choice.
4. Click on the **Microsoft Word** menu choice to start the program.

If you have a shortcut set up for Word, you can start Word from the shortcut by double-clicking on the Word shortcut icon.

SELF ASSESSMENT EXERCISE 1

Starting Word

Before you begin: Ensure that your computer is on and that Word 2000 has been correctly installed.

What you do	**Comments/Prompts**
1. Click on the **Start** button on the displayed.	The **Start** menu is displayed.
2. Click on **Programs** on the **Start** Menu	The **Programs** sub-menu is displayed.
3. In the sub-menu click on **Microsoft Word.**	Microsoft Word is launched.
4. Observe the on-screen Office Assistant. To show the Office Assistant if it is currently hidden choose: **Help, Show the Office Assistant**	The Office Assistant is an animated online Help system that provides Help topics and tips while you work.
5. Click on the "Paperclip" (or any alternate office assistant symbol that has been set) to close the text.	

6. If necessary, in the Office 2000 Registration Wizard dialog box click on **Register Later** and **Exit.**	To register at a later time.
7. To close the Office Assistant Choose: **Help, Hide the Office Assistant**	To close the Office Assistant. You can also hide the Office Assistant by right clicking on it and choosing the Hide command.

3.1.2 Exiting from Word

To exit the Word 2000 program,

1. Click on **File**
2. Click on **Exit**

SELF ASSESSMENT EXERCISE 2

Exiting from Word

What you do	Comments/Prompts
1. Click on **File**	The File drop-down menu appears.
2. Click on **Exit**	Microsoft Excel is closed.

Further Practice Exercise

1. Start Word 2000 again. **Hint:** If you need help, refer to Exercise 7.

3.2 Creating a New Blank Document and the Basics of Entering Text

Word is a **WYSIWYG** (what-you-see-is-what-you-get) word processor. Depending on which view Word is in, the screen display will show you how the text will look when you print the document.

3.2.1 A New Blank Document

At startup, Word provides you with a new unnamed document. You can begin typing in that document, open an existing document, or create a new one. To create a new document, click on the **New Blank Document**  button on the Standard toolbar or press <Ctrl> + N To create a new document by using the menu, choose **File, New** and click on **OK**.

3.2.2 The Text Area

Every document has a text area. As you type, characters are inserted in the text area at the insertion point. To place the insertion point, position the mouse pointer (whenever it appears as an I-beam) and click the mouse button. Alternatively, you may make use of keyboard combinations to move the cursor to the correct position.

3.2.3 Using the <Enter> Key

In word processing, you **must not** press the **<Enter>** key to each line of text. When text does not fit on a line, it automatically flows to the beginning of the next line. This is called word wrap.

However, you do use the **<Enter>** key to:

- end a short line (one that does not extend to the right margin);
- end a paragraph; or
- create a blank line.

3.2.4 Nonprinting Characters

Word can display a number of special symbols on the screen that indicate each time you have pressed **<Enter>**, **<Spacebar>**, and **<Tab>**, among others. These nonprinting characters are especially useful when you are editing documents. To display these special symbols, click on the **Show/Hide** button on the *Standard* toolbar.


←Show/Hide button

SELF ASSESSMENT EXERCISE 4

Creating a New Documents, Entering Text, and Identifying Nonprinting Characters

What you do	Comments/Prompts
1. Move the mouse pointer over the first button on the Standard toolbar. Observe the Screen Tip.	 (The Standard toolbar is the leftmost toolbar or the top bar if the Standard and Formatting toolbars are displayed separately) "New Blank Documents" is displayed.
2. Click on the **New Blank Document** button.	To create a new document.

3. Observe the insertion point	This is the blinking vertical bar that always appears on the first line in the upper-left corner of a new document. Its location determines where text or other items will be entered into the document.
4. Observe the mouse pointer	The mouse pointer is usually an I-beam when it is in the text area. When moved outside the text area, the mouse pointer becomes an arrow.
5. Type: **Interoffice Memo**	To enter the characters at the insertion point.
6. Press: **<Enter>**	To end the line.
7. Press: **<Enter>** again	To create a blank line.
8. Type: **To:**	
9. Observe the screen	Each time you pressed Enter, Word placed a paragraph mark (¶) in the document. Each time you pressed the Spacebar, Word placed a space mark (.) in the document. These nonprinting characters appear only on the screen, not on the printed document. If these are not currently visible, then they have been hidden.
10. On the Standard toolbar, click on the Show/Hide button	 (This button might be displayed on the standard docked toolbar. Depending on your monitor size and settings, the placement of buttons will vary. If you cannot find a button on the toolbar, it will be the docked toolbar.) To hide the nonprinting characters.
11. Observe the screen	The nonprinting characters do not appear on the screen.
12. Display the nonprinting characters.	(Click on the Show/Hide button).

4.0 CONCLUSION

A word processing program provides facilities to edit documents and define their layout and enable them to be printed.

5.0 SUMMARY

Word processing is the use of computers to create, revise and save documents for printing and future retrieval.

6.0 TUTOR-MARKED ASSIGNMENT

Give examples of at least three tasks in which you would make use of a word processing program.

7.0 REFERENCES/FURTHER READING

French, C. S. (2000). *Computer Science* (5th ed.) Gosport, Hants: Ashford Colour Press.

UNIT 5 FURTHER WORD PROCESSING PROGRAM FACILITIES

CONTENTS

1.0 Introduction
2.0 Objectives
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    3.2 Using the Backspace Key
    3.3 Autocomplete
    3.4 Saving a File
        3.4.1 The Save as Command
        3.4.2 Naming a Document
        3.4.3 The Save as Dialog Box
        3.4.4 Closing a Document
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

The advantages of word processing include the ability to:

- Store typed documents in the computer
- View the document on screen before printing
- Correct mistakes
- Insert or delete words
- Move sections of text to another part of the documents
- Incorporate other text without having to retype it
- Store documents on backing store for later recall
- Change layout of the document
- Print the document many times.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- use tab key
- use some other facilities of Microsoft Word 2000.

3.0 MAIN CONTENT

3.1 Using the Tab Key

Tabs make it easier to align text precisely. Pressing the Tab key inserts a tab characters, moving the insertion point to the next tab stop. Tab stops are preset at 1.27cm increments.

3.2 Using the Backspace Key

By pressing the Backspace key, you can delete the character or space immediately to the left of the insertion point.

3.3 Autocomplete

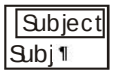
As you type certain common words, dates, or names, Word will suggest the complete word or phrase after you type the first few letters. This feature is called AutoComplete. When the suggestion appears, you can press **<Enter>** or **<F3>** to accept the suggestion, or just keep typing to reject. For instance, when you are typing a letter and you do not know exactly who will be reading it, you would normally type "To Whom it May Concern". Using AutoComplete, you can just type "To W' and press **<F3>**. Word will automatically finish the typing for you with type "To Whom it May Concern." You can also add your own AutoComplete entries and delete them as needed.

SELF ASSESSMENT EXERCISE 1

Using Tab, Autocomplete, Backspace, and the Word-wrap Feature while Entering Text

Before you begin: The insertion point should be at the end of the "To:" line.

What you do	Comments/Prompts
1. Press: **<Tab>**	To insert a tab character, moving the insertion point to the first default tab stop, 1.27cm from the left margin. Default tab stops are set every 1.27cm
2. Observe the nonprinting mark for **<Tab>**	Each time you press <Tab>, an arrow is placed in the document.
3. Type: **Johanna Burger** Press: <Enter>	To end the line and move the insertion point to the next line.
4. Type: **From:** Press: **<Tab>**	

5. Type: **Kathleen de Winter.** Press: <Enter>	
6. Type: **Subj** Observe the text	The first four letters of the word "Subject:"  Just above the text you typed is a box with the word "Subject:" in it. This ScreenTip is displayed because there is an AutoComplete entry for the word "Subject."
7. Press: **<Enter>**	The word "Subject" is completed
8. Press: **<Tab>** Observe the tab stop	Because the word "Subject:" extends beyond the 1.27cm mark, pressing <Tab> moves the insertion point to the next default tab stop at 2.54cm
9. Press: **<Backspace>** nine times.	To remove the tab character and the text "Subject:".
10. Type: **Re:**	
11. Press: **<Tab>**	To move the insertion point to the first default tab stop at 1.27cm
12. Type: **Client Referral**	
13. Press: **<Enter> twice**	
14. Type: **I have a client referral for you. The gentleman is looking for a house in your territory. Please see me urgently for more details.** Observe the text	The words automatically flow to the next line.

3.4 Saving a File

Before you save a document, it exists only in computer memory, a temporary storage area. For permanent storage, a document must be saved to some location, such as a hard drive or a floppy disk.

To save a document, you use either the File, Save As… or the File, Save command.

3.4.1 The Save as Command

The **File, Save As**… command enables you to:

- save a document for the first time;
- save a document with a new filename; and
- save a document in a different location (on another disk or in a different folder).

To use the **File, Save As**… command choose **File, Save As**… to display the **Save As** dialog box. In the **Save In** list box, select the appropriate location (disk, drive, or folder). in the **File Name** text box, type the name of the file. Click on **Save**.

When you save a file, Word adds the filename extension. DOC to identify the file as a document file. You should avoid adding filename extensions yourself.

3.4.2 Naming a Document

When you save a file for the first time, Word automatically assigns a filename by using the first words of your document. You can accept this default name or name it something different.

A filename should be descriptive so that you can remember the file's contents. A filename in Word can contain up to 255 characters, spaces, and other punctuation. A file cannot contain any of the following characters: □:*?"< >|. For example, a file cannot be A: Drive. (These constraints are determined by the Windows operating system.)

3.4.3 The Save as Dialog Box

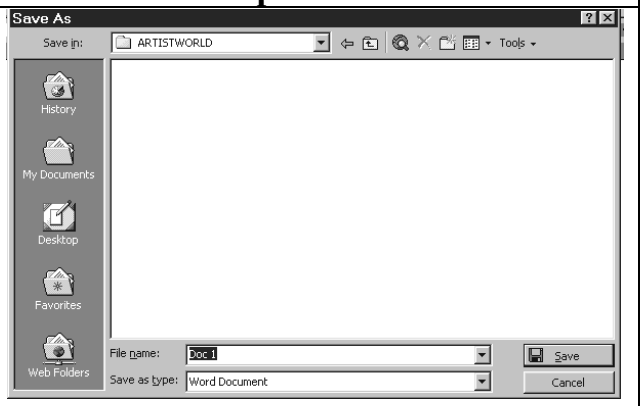
The Save As dialog box displays five folders on the left side of the dialog box: History, My Documents, Desktop, Favorites, and Web Folders. These folders make accessing previous documents and saving new documents easier by enabling you to click on and open a folder directly. To open one of these folders, click on the folder.

3.4.4 Closing a Document

When you have finished with a document, choose **File, Close** to close the document window or double-click on the window's Control-menu icon.

SELF ASSESSMENT EXERCISE 2

Saving a Document for the First Time and Closing a Document

What you do	Comments/Prompts
1. Choose: **File, Save As**	 To display the Save As dialog box.
2. The **Save In** list box should be set to drive **A:**	If it is not set to Drive A:, please call your training adviser to assist you.
3. If necessary, select the text in the File name text box. To do this, click and drag the mouse over the text **Interoffice Memo.**	The text interoffice Memo is highlighted.
4. Type: **My Memo**	To name the document My Memo.
5. Click on **Save**	To save the file.
6. Observe the title bar	It has changed to display the document's name, My Memo.
7. Choose: **File, Close**	To close the document and remove it from memory.

4.0 CONCLUSION

Word processing has many advantages over using a typewriter.

5.0 SUMMARY

Here you learned how to use some of the facilities of Microsoft Word 2000. Your knowledge will be useful in the next units.

6.0 TUTOR-MARKED ASSIGNMENT

Please create a new document in Microsoft Word 2000. Type the following text taking care of use capital letters as well as bold, italics and underline formats as found in the example.

"**Word Processing** is the use of computers to create, revise and save documents for printing and future retrieval. You enter information into the computer by using a keyboard. As you type, the words are displayed on a monitor, or screen, and are stored in **computer memory** rather than on paper. Therefore, a **Word Processing** program can be used on a daily basis by school teachers to simplify tedious tasks."

Save the file as **Typing1**. Close the file.

7.0 REFERENCES/FURTHER READING

French, C. S. (2000). *Computer Science* (5th ed.) Gosport, Hants: Ashford Colour Press.

MODULE 3

Unit 1 Word Processing Continued
Unit 2 Copying a Text, Saving Changes to a Document and Formatting
Unit 3 Paragraph Formatting: The Spelling Checker and Introduction to Printing a Document
Unit 4 Spreadsheet
Unit 5 Entering and Correcting Data

UNIT 1 WORD PROCESSING CONTINUED

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  - 3.1.1 The File, Open Command
  - 3.1.2 Editing a Document
- 3.2 Using Overtype Mode
- 3.3 Selecting Text
- 3.4 Deleting Text
- 3.5 Replacing Text
- 3.6 Moving and Copying Text
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  - 3.6.2 Cutting and Pasting Text

4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Text files can be created and modified with the aid of a special program called an editor. Many documents not requiring anything but a very basic page layout are prepared this way.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- use file and open documents
- edit a text a document

- select a text
- delete a text
- replace a text
- move a text
- copy a text.

3.0 MAIN CONTENT

3.1 Opening and Editing a Document

3.1.1 The File, Open Command

The **File, Open** command places a copy of a file on disk into an active document window. The Open dialog box lists all of the document files on the current disk, in the current folder.

To open a listed file, either click on the filename in the **File name** list box on **Open**, or double-click on the filename. A copy of the file is placed in an active document window.

To make recently used documents more accessible, Word also tracks documents that have been opened and places their names as choices at the bottom of the **File** menu.

To open one of these listed files, choose **File** and click on the document name.

3.1.2 Editing a Document

By default, Word is in insert mode; as you type, text to the right of the insertion point is pushed to the right. To insert text, place the insertion point where you want to add text and begin typing.

To place the insertion point, position the I-beam at the desired location and click the mouse button.

3.2 Using Overtype Mode

Word gives you the option of turning off insert mode and turning on overtype mode. Instead of pushing text to the right as you type, overtype mode replaces existing text one character at a time.

You can turn on overtype mode by double-clicking on **OVR** on the status bar or by pressing the **<Insert>** key on the keyboard. If you accidentally turn on the overtype mode, you can double-click on **OVR** or press the **<Insert>** key to turn it off.

3.3 Selecting Text

Before you can delete, move, copy, or format text, you must select it. **Table 1** below details various techniques for selecting text.

Table 1

Selection method	Technique
Drag	Point at one end of the text to be selected. Press and hold the mouse button. Move the mouse to the other end of the text; this creates a highlight (selection) between the two ends. Then release the mouse button.
Select a word	Point anywhere inside the word and double-click the mouse button. The trailing space is automatically selected along with the word.
Select a sentence	Point anywhere inside the sentence. While pressing <Ctrl>, click the mouse button. End punctuation and trailing spaces are automatically selected along with the sentence

3.4 Deleting Text

- To delete the character immediately to the right of the insertion point, press the **<Delete>** key.
- To delete the character or space immediately to the left of the insertion point, press the **<Backspace>** key.
- To delete selected text, select the text and press **<Delete>**.
- To delete an extra line (paragraph mark), you can place the insertion point at the beginning of the line below the blank line and press the **<Backspace>** key.

3.5 Replacing Text

There may be times you want to replace existing text with new text, when it is just more efficient or retype text than it is to edit it. To do this, select the text you want to replace and begin typing the new text.

SELF ASSESSMENT EXERCISE 1

Opening a Document and Inserting Text

What you do	Comments/Prompts
1. Choose: **File, Open**…	To display Open dialog box.
2. The **Look in:** list box should be set to **A:**	If it is not, please ask your training adviser for assistance.

3. From the list of filenames, select **My Memo**	
4. Click on **Open**	To open the document
5. Point to the left of the **h** in **house** located in the second sentence of the body paragraph	The gentleman is looking for a house in
6. Click the mouse button	To place the insertion point before "house." This is where the new text will be inserted.
7. Type: **large**	Existing text is pushed to the right of the new text.
8. Press: **<Spacebar>**	To insert a space between the words "large" and "house"
9. Hold down the **<Ctrl>** key and press the < End> Key.	To move the cursor to the end of the document.
10. Press: **<Enter>** twice	To end the paragraph and to insert a blank line before typing the next paragraph.
11. Type: Joan Brown informs me that you have numerous properties available in your region at the moment	
12. Press: **<Enter>**	

SELF ASSESSMENT EXERCISE 2

Deleting Selected Text

What you do	**Comments/Prompts**
1. **urgent** located in the last sentence of the first paragraph	
2. Press and hold the mouse button.	
3. Drag over the world urgent and then release the mouse button.	To select the text.
4.	To delete the selected text.

SELF ASSESSMENT EXERCISE 3

Replacing Selected Text

What you do	**Comments/Prompts**
1.	The name is selected

click	
2. Type: **Joe**	"Joe" replaces "Johanna."
3. Select the word **House.**	
4. Type: **property**	To replace "house" with "property"

3.6Moving and Copying Text

After you have edited text, you might want to move or copy that text to another part of the document. The *Clipboard* enables you to do that.

3.6.1 The Clipboard

The Windows environment provides a temporary storage area called the Clipboard for those times when you move or copy text. When you cut or copy selected text, it is placed on the Clipboard. Pasting inserts a copy of the Clipboard contents at the insertion point. Entries remain on the Clipboard until you cut or copy another entry to it or until you exit Windows. If you have placed text or graphics on the Clipboard and you exit Windows, the Clipboard content is erased.

3.6.2 Cutting and Pasting Text

To move text within a document, the following process applies:

1. Select the text to be moved.
2. Click on the **Cut** button (or choose **Edit**, **Cut** or use **<Ctrl + X**)
3. Place the insertion point where you want the text to be placed.
4. Click on the **Paste** button (or choose **Edit**, **Paste** or use **<Ctrl + V**)

SELF ASSESSMENT EXERCISE 4

Moving Selected Text

What you do	**Comment/Prompts**
1. Select the entire paragraph that begins **Joan Brown informs me** and the blank line following it.	
2. On the *standard* docked toolbar, Click on the Cut button Hint: (if you cannot see this button, click on the more buttons button and select it from the list of "more button")	 To remove the selected text from the document and place it on the Clipboard.
3. Place the insertion point at the	

beginning of the paragraph that begins with **I have a client referral**	
4. Click on the **Paste** button	 To paste a copy of the Clipboard contents at the insertion point.
5. Save the file	

4.0 CONCLUSION

An editor is a program used to create text files or make changes to existing files.

5.0 SUMMARY

Basically you learned how to open and edit a document. You are now also in a position to select, delete or replace text.

6.0 TUTOR-MARKED ASSIGNMENT

1. In this exercise, you will open the letter that was addressed to Mr. and Mrs. Van Tonder. A similar letter needs to be addressed to Mr. and Mrs. Padget-Brown concerning their son Charles. Rather than retype the entire letter, simply make the necessary changes.

Open the document **Typing 2**. Change the relevant address and greetings as necessary. Print and then save the document as **Typing 3.**

2. Please set at exam paper using Microsoft Word. The subject matter of the exam may be any of your choice. However, it is necessary to comply with the following specifications:

- The name of the school should appear in capital letters in font Times New Roman, size 14, centered at the top of the page.
- The subject, grade or form, total marks as well as the duration of the exam should appear just below the heading at the top of the page.
- A minimum of ten questions must appear in the exam paper.
- The value of each question must be indicated.
- Please include at least two multiple choice and two “fill in” questions.

3. Please type the following document exactly as it appears below. The number in brackets shows the font size of the text.

Grade 7 Class List (14)

Name (14)	**Surname**	**House**
Peter (12)	Appleby	Red
Robbert	Archer	Blue
Simon	Bester	Blue
Arnie	Cook	Green
Jason	De Winter	Blue
Scott	Heard	Red
Anash	Naidoo	Red
David	Munroe	Green
Lucas	Marosho	Red

7.0 REFERENCES/FURTHER READING

French, C.S. (2000). *Computer Science* (5th ed.) Gosport, Hants: Ashford Colour Press.

UNIT 2 COPYING A TEXT, SAVING CHANGES TO A DOCUMENT AND FORMATTING

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1.0 Introduction
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    3.2 Saving Changes to a Document
    3.3 Formatting Text
        3.3.1 Character Formatting
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Here we will consider more aspect of word processing.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- copy a text
- save changes to a document
- format a text.

3.0 MAIN CONTENT

3.1 Copying Text

To copy text within a document, the following process applies:

1. Select the text to be copied.
2. Click on the **Copy** button (or choose **Edit**, **Copy** or use **<Ctrl> + C**).
3. Place the insertion point where you want the text to be placed.
4. Click on the Paste button (or choose **Edit**, **Paste** or use **<Ctrl> + V**).

SELF ASSESSMENT EXERCISE 1

Copying Selected Text

What you do	Comment/Prompts
1. Select the text **Kathleen de Winter**	Kathleen de Winter
2. From the Standard toolbar, click on the **Copy** button	 To place a copy of the selected text on the Clipboard.
3. Press and hold down **<Ctrl>** and press **<End>**	The insertion point will move to the end of the document
4. Press: **<Enter>** three times	
5. Click on the **Paste** button	To paste a copy of the Clipboard contents at the insertion point.

3.2 Saving Changes to a Document

To save a document with its current name, use the **File, Save** command. You can access this command by clicking on the **Save** button on the Standard toolbar, or by choosing **File, Save**. This command does not enable you to rename the document or change its location. The **File, Save** command updates the file on disk, replacing the original file with the document in the active window.

Some general rules for saving are:

- Save at least once every 15 minutes.
- Save before printing
- Save before spell-checking.

SELF ASSESSMENT EXERCISE 2

Saving Changes to a Document

What you do	Comment/Prompts
1. Observe the title bar at the top of the window	The document has already been named My Memo.
2. Click on the **Save** button	 To save the document with the same name in the same location.

	(Clicking on the save button is the same as choosing File, Save.)

3.3 Formatting Text

It is possible to change the appearance and position of text by applying various *formatting* options. On this course you will be introduced briefly to two kinds of formatting namely, *character* and *paragraph*.

3.3.1 Character Formatting

Character formats – such as bold, italics, underlining, font face and font size — can be used to emphasize text in a document.

The Formatting toolbar, shown in Figure 1 below, has been designed specifically for formatting. The more commonly used formats have been assigned tools on this toolbar. If an option that you wish to set were not available from the toolbar, you would have to make use of the **Format, Font**… dialog box.

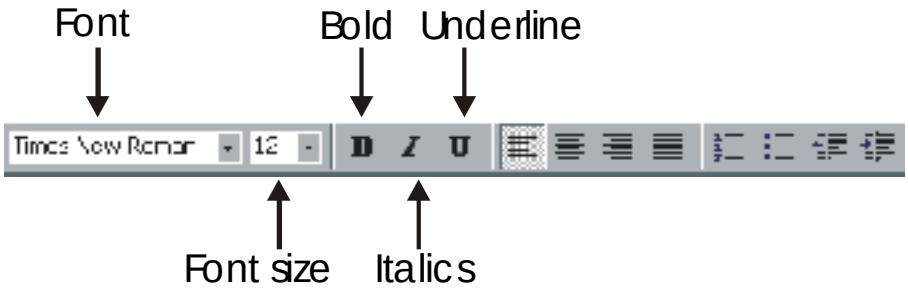


Figure 1: The Formatting Toolbar

You can use buttons on the Formatting toolbar to change the appearance of all or part of a document quickly.

Formatting may be applied to:

1. Existing test
   or
2. May be selected *before* entering text.

If you wish to apply formatting to text that has already been typed, select the text the appearance of which you would like to change, and then click on the button of your choice. For example, to apply boldface to existing text, select the text and then click on the **Bold** button.

If you wish to apply formatting *before* typing, simply select the formatting options that you wish to apply and then type the text. When you no longer wish the format to apply, turn the formatting option off, or change it to an alternative, whichever is applicable.

Some Formatting buttons are toggles, that is, the same button is used to turn a formatting feature "on" and "off". Examples of toggle buttons are bold, italic and underline. To remove the formatting after it has been applied, select the text, the formatting of which you would like to remove, and click on the corresponding button on the *Formatting* toolbar.

Some Formatting features, such as the Font and Font size options, are not toggling buttons. These features require that some selection always be made. In other words, you cannot turn the Font option "off"; you can only change it to a different Font.

To apply formatting on a single word, place the insertion point in the word and apply the formats.

Table 2 below includes a list of shortcut keys that may be used for character formatting. Only the most frequently used formatting options have been assigned shortcut keys. They are worth learning, as typing speed is not compromised when applying formatting using this method.

Table 2

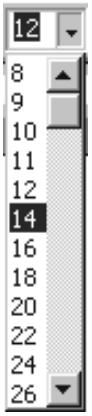
Shortcut key combination	**Formatting result**
<Ctrl> + B	Bold
<Ctrl> + I	Italic
<Ctrl> + U	Underline

SELF ASSESSMENT EXERCISE 3

Using the Formatting Toolbar to apply and remove Character Formats

Before you begin: The document **My Memo** should still be open on your screen.

What you do	**Comment/Prompts**
1. Select the word **numerous** in the first paragraph of text.	
2. Using the *Formatting* toolbar, click on the Italic button. If it is not currently visible, look on	 To apply the italic format to the

the formatting docked toolbar.	word “numerous”.
3. Select the text **Client Referral** above the first paragraph	
4. Using the **Formatting** toolbar, click on the Underline button. Observe the text	 To apply the underline format to the selected text.
5. Select the name **Kathleen de Winter** at the bottom of the document	
6. Click on the Bold button	 To apply the bold format to the selected text
7. Select the name **Joe Burger**	The text is highlighted
8. On the *Formatting* toolbar, Observe the Font drop-down list	 The font “Times New Roman” is selected
9. From the Font drop-down list, select Arial (Remember, to open or “expand” the box, you must click on the down arrow).	To format the selected text with the Arial font
10. Using the *Formatting* toolbar, display the **Font size**drop-down list and observe the current font size	The font size is set to 12.
11. Select: 14	 The font size is reset to 14.

4.0 CONCLUSION

Copying texts, and saving changes to a document and formatting are important in word processing.

5.0 SUMMARY

Copying a text required four processes. Here you also learned two kinds of formatting: character and paragraph.

6.0 TUTOR-MARKED ASSIGNMENT

Open the file **Typing 1**. Insert the text “around the world” in the last sentence just after the word “teachers”. Insert the words “and or repetitive” before the last word of the paragraph. The revised sentence should read as follows: (changes have been underlined).

“Therefore, a ***Word Processing*** program can be used on a daily basis by school teachers around the world to simplify tedious and/or repetitive tasks”
Save and close the file.

7.0 REFERENCES/FURTHER READING

French, C.S. (2000). *Computer Science* (5th ed.). Gosport Hants: Ashford Colour Press.

UNIT 3 PARAGRAPH FORMATTING: THE SPELLING CHECKER AND INTRODUCTION TO PRINTING A DOCUMENT

CONTENTS

1.0 Introduction
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    3.2 The Spelling Checker
    3.3 Introduction to Printing a Document
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1.0 INTRODUCTION

You need to pay much attention to paragraph formatting and printing of documents.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- select the paragraph
- apply the format
- check selected text
- print a document.

3.0 MAIN CONTENT

3.1 Paragraph Formatting

Paragraph formatting, such as alignment, indents, and tabs can be used to affect the appearance of your document. To apply a paragraph format, you select the paragraph and apply the format. However, you can select the paragraph by just placing the insertion point in the paragraph, or by selecting any amount of text in the paragraph. The formats you apply will affect the entire paragraph.

Paragraph alignment may be applied before typing a paragraph or after the paragraph has been typed. Paragraph alignment determines how text is positioned between the left and right indents. There are four alignment options.

1. Left Alignment

Align Left:
Lines of text are aligned along the left indent. The text along the right side of the paragraph appears ragged. Left aligned is the default paragraph-alignment setting.

2. Center Alignment

Center:
Lines of text are aligned between the indents. Both the left and right sides of the paragraph appear ragged.

3. Right Alignment

Align Right
Lines of text are aligned along the right indent. The left and right indents are even with the left margins by default. If you apply paragraph alignment to a selected paragraph, the text will appear to align (left, center, right and justified) with the margins. The text along the left side of the paragraph appears ragged.

4. Justified

Justify:
Lines of text are aligned along both the left and right indents. Word adjusts the spacing between words so that they stretch from left indent to right indent. When the last line of a justified paragraph is short, however, it will not be stretched out.

Various methods are available by which you can apply paragraph alignment. On this course you will be introduced to one of the most common methods used to apply alignment, namely, selecting one of the alignment buttons on the *Formatting* toolbar. Table 3.1 on page 21 illustrates these buttons.

Table 3.1

Alignment	Button
Justify	
Right	
Left	
Center	

SELF ASSESSMENT EXERCISE 3

Using Paragraph Alignments

Before you begin: The document **My Memo** should still be open on your screen.

What you do	Comment/Prompts
1. Place the insertion point in the last paragraph of the document	"I have a client referral for you…"
2. On the *Formatting* toolbar, observe the Alignment buttons	
3. Click on the **Center** alignment button	 To center each line of the selected paragraph between the left and right indents.
4. Click on the **Right** alignment button	 To right align the paragraph
5. Click on the **Left** alignment button	 The paragraph is left aligned.
6. Click on the **Justify** alignment button	 The paragraph is justified.
7. Select the first paragraph of text	The paragraph is once again centered
8. Click on the **Justify** alignment button	 The paragraph is justified
9. Select **File**, **Save**	
10. Select **File**, **Close**	

3.2 The Spelling Checker

No matter how carefully you type or proofread a document, errors inevitably creep into documents. Word 2000 has provided certain proofing tools to help eliminate such errors from your final document. One of these is the *Spell Checker*.

Although a spelling checker is no substitute for proofreading, you can use this feature to help you create and edit your documents. Word checks each word in a document against its dictionaries, then highlights those words that it does not recognize. The spelling checker also checks

for such common typing mistakes as repeated words ("the the") and, in conjunction with the **AutoCorrect** feature, it checks for irregular capitalization ("tHe").

To check selected text, make the selection and click on the **Spelling and Grammar** button located on the *Standard* toolbar. To check an entire document, deselect any selected text, and place the insertion point at the top of the document before clicking on the **Spelling and Grammar** button.

When the spelling checker highlights a possible error, a list of suggested words may appear in the Suggestions list box, depending on whether the dictionary contains a word that is similarly spelled. The first word in the suggestion list is automatically selected. If Word's dictionaries do not recognize the highlighted word or if it has irregular capitalization, then you can choose from the following spelling options:

- **Correct the spelling**. If the correction that you want is highlighted in the **Suggestions** text box, click on **Change**. If the correction that you want is in the **Suggestions** list box but not highlighted, click on that word and click on **Change**. If the correction that you want is not suggested, type the correction in the top text box and click on **Change**. To automatically change all occurrences of the word throughout the document, click on **Change All**.
- **Leave the word unchanged**. If you want to leave the word as it is and continue the spell check, click on Ignore. To automatically ignore all further occurrences of the word, click on **Ignore All**.
- **Add the word to a dictionary**. If you want to add the word to a custom dictionary, click on **Add**.
- **Stop the spell-check procedure**. If you want to cancel the spell-check procedure at any point, click on **Cancel**. All changes made up to that point will be preserved. If you used the **Change All** or **Delete All** options, some instances of those words might not be changed or deleted.
- **Add the word to the AutoCorrect list**. You can add a mis-spelled word and its correct spelling to the **AutoCorrect** list by clicking on the **AutoCorrect** button.

If the error is that of repeated words, you can click on **Delete** to delete the second instance of the word.

The **Automatic Spell Check** feature informs you of spelling errors as you type. It can be enabled or disabled by choosing **Tools, Options…** and selecting the **Spelling & Grammar** tab. Then, under **Spelling**, select **Check spelling As You Type**. When you mis-spell a word, it will be underlined in red. To correct the spelling, right-click on the word to display a shortcut menu with alternate spelling suggestions and select the correctly spelled word.

SELF ASSESSMENT EXERCISE 4

Checking the Spelling of an Entire Document

What you do	Comments/Prompts
1. Open: Spelling Hint: File, Open	The file **Spelling** appears on your screen
2. Select **Tools, Options…** on the menu bar at the top of the screen	To verify that certain options have been deselected.
3. Please ensure that the following checkboxes have been deselected (turned off) Check spelling as you type Check grammar as you type Check grammar with spelling	For this particular exercise we do not want these features activated automatically.
4. Click on **OK**	
5. Make sure that the insertion point is at the top of the document	
6.  Click on the Spelling and Grammar button	The Spelling and Grammar dialog box is displayed.
7. Observe the dialog box	The first unrecognized word in the document, "rright," is automatically highlighted. NB: Always check that the correct word has been selected in the Suggestions box before clicking on Change.
8. Click on: **Change**	"rright" is changed to "right". The next unrecognized word in the document "douts" is highlighted.
9. Ensure that "douts" has been selected in the list of suggested words then click on: **Change**	"douts" is changed to "douts The next unrecognized word in the document "confidence" is highlighted.

10. Ensure that "confidence" has been selected in the list of suggested words the click on: **Change**	"confidence" is changed to "confidence". The next unrecognized word in the document "diminished" is highlighted.
11. Ensure that "diminished" has been selected in the list of suggested words then click on: **Change**	"diminished" is changed to "diminished". The next unrecognized word in the document "psychologists" is highlighted.
12. Ensure that "psychologists" has been selected in the list of suggested words then click on: **Change**	"psychologists" is changed to "psychologists". The next possible error in the document "of' is highlighted
13. Observe the dialog box	Although "of' is not mis-spelled, it has been typed twice. (repeated)
14. Click on **Delete**	To delete the second "of' and to have the Spelling and Grammar check continue.
15. Please continue with the spell check until all correction have been made. Please note: The word "Midpower" will be shown as unknown. It is in fact correct. Please select **Ignore** when this word appears in the dialog box.	
16. Click on **OK**	To close the message box that reads, "The spelling check is complete."

3.3 Introduction to Printing a Document

The final step in the production of a document is printing. Learning about finer print details does not lie within the scope of this course and will be dealt with on program specific course. We will therefore concentrate on the basic principles of printing only.

To print the document in the above window, the following process applies:

1. Choose **File, Print** (or press **<Ctrl> + P**). This display the Print dialog box see figure 3 below.

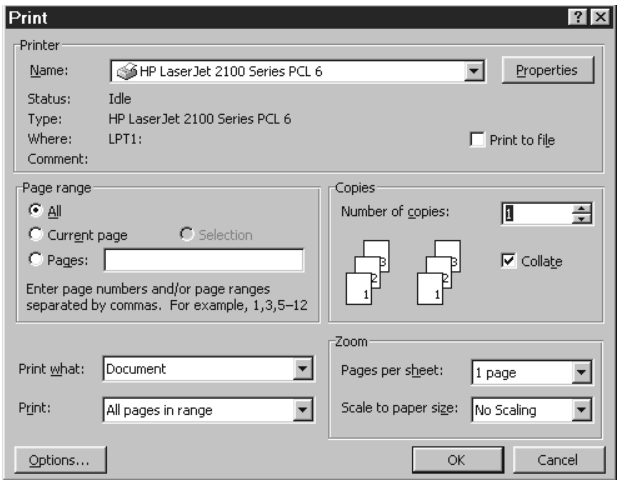

Figure 3: *The Print dialog box*

2. If you have access to more than one printer from your computer, select the correct printer in the printer **Name** box.
3. Select what you want to print in the **Page range** (By default, the entire document is printed, but you can choose to print the current page, multiple pages, or selected text.)
4. Select how many copies you wish to print.
5. Click on the Options button to locate additional print settings if required.
6. Click on **OK** to start the printing process.
   Or

Click on **Cancel** to close the dialog box and return to the document without printing.

The Print button on the Standard docked toolbar sends the document directly to the printer, bypassing the Print dialog box. Therefore, the default settings will be used.

 ← Print Button

SELF ASSESSMENT EXERCISE 5

Printing the Finished Document

What you do	**Comments/Prompts**
1. Open: **My Memo**	
2. Choose: **File, Print…**	To display the print dialog box
3. Examine the print options in the dialog box	
4. Click on **Cancel**	To cancel the print command and

	close the print dialog box. (Or click on OK to print the document)
5. Select **File, Exit** to exit Word 2000	

4.0 CONCLUSION

Word adjusts the spacing between words so that they stretch from left indent to right indent.

5.0 SUMMARY

Although a spelling checker is no substitute for proofreading, spelling checker could be used to create and edit documents.

6.0 TUTOR-MARKED ASSIGNMENT

Type a letter to the parents of students of Slugger Van Tonder under the following institutions:

- The letter is to be typed in Times Roman Font at a font size of 12,
- The address of Mr. and Mrs. Van Tonder as well as the current date, should be aligned to the right of the document.
- The greeting is to be followed by a suitable heading, which is to be underlined and centered across the page.
- The body of the letter should assist a minimum of two paragraphs of text. The alignment of this text should be justified.
- Your name at the conclusion of the letter should be typed in capital letters with bold and italics applied.

Spell check the letter, taking care to correct all spelling errors.
If you have access to a printer, please print the completed letter.
Save the document as Typing. Close the file.

7.0 REFERENCES/FURTHER READING

French, C.S. (2000). *Computer Science* (5th ed.). Gosport Hants: Ashford Colour Press.

UNIT 4 SPREADSHEET

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1.0 Introduction
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    3.2 The Paper Spreadsheet
    3.3 The Excel Program
        3.3.1 Starting (Launching) Excel
    3.4 The Workbook Environment
        3.4.1 The Excel Workbook Structure
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5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

A spreadsheet comprises a grid of numbered rows and lettered column intersecting in cells. A cell can contain either text or numbered values.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define a spreadsheet
- discover some of the features and limitations of a paper spreadsheet
- start Excel
- identify the features of a workbook.

3.0 MAIN CONTENT

3.1 Definition of a Spreadsheet

Before we compare the paper spreadsheet to the electronic spreadsheet, it is importance to clarify exactly what is meant by the spreadsheet.

A spreadsheet consists of information written in tabular form; in other words, rows and/or columns of figures and/or text. A series of data depicted horizontally is called a “row” while a series of data depicted vertically is called a “column”. These data may consist of text, “raw” numbers or of calculated results. The primary objective of a spreadsheet is to keep a record of numerical information.

3.2 The Paper Spreadsheet

In order to appreciate the Excel software program, it is helpful to understand the limitations of a "paper spreadsheet". By "paper spreadsheet" we mean a non-electronic spreadsheet that has either been hand-written or typed.

Working with a paper spreadsheet can be complicated and time consuming. Information that changes must be erased and rewritten, causing computations to be incorrect until they are redone. If any raw number changes, calculations dependent on that number have to be re-calculated. Failure to do so will result in incorrect answers. This causes a domino effect; in other words, if information at the top of the spreadsheet needs to be recalculated, all subsequent calculations which are related to the initial calculation, would need to be recalculated.

For example, an incorrect entry in a chequebook can throw off a running balance; when the error is found, a significant number of computations may need to be redone to arrive at the current balance.

Paper spreadsheets have limited functionality because they are static. In other words their practical application is limited because of inflexibility. Soon you will see that "electronic spreadsheets" do not have this limitation.

Figure 4.1 is an example of a paper statement. In Exercise 11, you will examine the various element of the paper spreadsheet.

Personal Budget for the First Quarter
Monthly income (Net) ..... > R 1.475.00

	January	**February**	**March**	**Quarter Totals**
Rent	600.00	600.00	600.00	R1.800.00
Telephone	48.25	43.50	42.10	R 133.85
Utilities	67.27	75.92	62.89	R 206.08
Charge Cards	200.00	110.00	70.00	R 380.00
Heating Oil	125.52	150.57	50.32	R 326.41
Auto Insurance	150.00	—	—	R 150.00
Cable TV	30.25	30.25	30.25	9075
Monthly Totals:	R 1,221.29	R 1.010.24	R 855.56	
Balance:	R 253.71	R 464.76	R 619.44	

Figure 4.1: A sample of paper spreadsheet.

SELF ASSESSMENT EXERCISE 1

Examine a Paper Spreadsheet

Objective: To discover some of the features and limitations of a paper spreadsheet.

What you do	Comments/Prompts
1. Look at Figure 4.1	It illustrates a typical paper spreadsheet
2. Observe how the information is arranged	It is laid out in columns and rows.
3. Look at the entries in the spreadsheet	The spreadsheet contain text, straight or "raw" numbers, and numbers that are the result of computations.
4. Look at the calculated values in the Quarter Totals column and the Monthly Totals and Balance rows at the bottom of the spreadsheet.	If you change any of the numbers that contribute to these calculated values, the totals will have to be recalculated. This is one of the limitations of using paper spreadsheet.
5. Notice the appearance of the totals	The computations in Quarter Totals and Monthly Totals include rand signs to signify currency
6. Observe the column widths	Some columns are wider than others are.

Further Practice Exercise

1. In Figure 4.1, cross out the current amount for the January telephone bill and change it to 55.
2. Circle the number that must be recalculated because of this change.

3.3 The Excel Program

Excel is a software application that provides an "electronic spreadsheet," or worksheet environment. Excel's worksheet is an electronic replacement for traditional planning tools: the pencil and eraser, the accountant's ledger sheet and the calculator.

An Excel file, called a *workbook*, can contain *worksheets.* Excel can be used to manage numbers and calculations. You may use Excel for purposes such as the setting up of profit and loss statements, cash flow forecasts, sales reports, product lists inventories, budgeting, project planning etc.

Unlike the paper spreadsheet, you can set up an Excel workbook as a responsive and dynamic work environment; you can create formulas in Excel that will get automatically update when you change your data.

3.3.1 Starting (Launching) Excel

To start Excel:

1. Turn on your computer
2. Click on the Windows **Start** button to access the start menu
3. Choose Programs, Microsoft Excel.

SELF ASSESSMENT EXERCISE 2

Starting Excel

Before you begin: Ensure that the computer has been turned on, and that the Windows desktop is displayed.

Objective: To Start Excel and to Exit from Excel

What you do	**Comments/Prompts**
1. Click on the **Start** button on the **Taskbar**	The **Start** menu is displayed.
2. Click on **Programs** on the **Start** menu.	The **Programs** sub-menu is displayed.
3. In the sub-menu click on **Microsoft Excel**	Microsoft Excel is launched. Next you will exit from Excel
4. Click on **File**	The File drop-down menu appears.
5. Click on **Exit**	Microsoft Excel is closed.

Further Practice Exercise

1. Start Excel again. Hint: If you need help, refer to Exercise 12.
2. Exit from Excel. Hint: If you need help, refer to Exercise 12.

3.4 The Workbook Environment

The Excel worksheet consists of various elements. In order for you to be able to capture and manipulate data, it is necessary to be familiar with certain elements found in the worksheet as well as with some of the terminology associated with spreadsheets.

3.4.1 The Excel Workbook Structure

The workbook window displays the workbook – an Excel file in which you work and store your data. A workbook is made up of worksheets. Different types of sheets may appear in a workbook.
The components of the workbook window are the workbook itself, scroll bars, sheet tabs, and stab crolling buttons.

- **Workbook:** The default Excel workbook contains 3 worksheet names Sheet1 through Sheet3. The sheet names appear on tabs at the bottom of the workbook. A new Excel workbook file can contain up to 255 separate worksheets. The Excel worksheet is a grid of 256 columns by 65,536 rows. *Columns* are designated by letter running down across the top of the worksheet, and *rows* are designated by numbers running down the left border of the worksheet. Column headings begin with letter "A" and continue through the letter "Z." After the 26th column (Column Z), headings become double letters, From "AA" to "IV". Row headings begin with number 1 and continue through the number 65536.
- **Cells:** the intersection of a column and a row. Cells are typically referred to by their column and row location. For instance, column A, row 1 is cell A1. You enter data (text or numbers) directly into any cell that is active. A thick, dark border distinguishes the active cell.
- **Formula bar:** a bar located near the top of the window that displays the constant value or formula used in the active cell.
- **Scroll bars:** to the right of and below the worksheet grid. Use the scroll bars to display different areas of the active worksheet.
- **Sheet tabs:** at the bottom of the workbook. You can click on the sheet tabs to move from one sheet to another in a workbook.
- **Tab scrolling buttons:** to the left of the sheet tabs. You can click on the tab scrolling buttons to scroll the display of sheet tabs one at a time, or to display the first or last grouping of sheet tabs within a workbook.

The other parts that complete the full Excel screen are the standard elements associated with a "Window", for example, a title bar, a menu bar, a toolbar, etc. You have already been introduced to these elements in Module 2 of this course. Detailed explanations of these elements may be found in Module 2.

SELF ASSESSMENT EXERCISE 3

Identifying the Features of a Workbook

What you do	Comments/Prompts
1. Start Excel	
2. Observe the workbook and its tabbed worksheets	It is like a stack of paper spreadsheets. The tabs enable you to move from one worksheet to another. There are 3 sheets in workbook, and you can add more to have as many as 255 sheets in a single workbook.
3. Observe the top portion of the screen.	At the very top of the window is the Excel title bar. Just below it is the menu bar followed by the two toolbars arranged in a single row, and then formula bar.
4. Observe the column headings	Located at the top of the worksheet, column headings label the columns with the letters "A" to "IV". A column extends down through all of the rows.
5. Observe the row headings	Located on the left side of the worksheet, row headings number the rows from 1 to 65536 and extend through all of the columns
6. Examine a cell	A cell is the intersection of a column and a row. Cells are named by their column and row locations; for example, A1, C12, or IV65536.
7. Look for the active cell	A bold border surrounds the active cell. When a new worksheet is created, the active cell is cell A1.
8. Notice the cell reference area in (Hint. The formula bar is located just above the column heading).	On the far-left side of the formula bar, the reference area identifies the current or active cell.

4.0 CONCLUSION

You have examined the various elements of the paper spreadsheet. Moreover, you can start Excel and exit from Excel and identify the features of a workbook.

5.0 SUMMARY

Spreadsheet packages provide a wide range of facilities for creating and manipulating formulated tables and charts of values.

6.0 TUTOR-MARKED ASSIGNMENT

Please create the spreadsheet below taking special note of the following:

- The label in cell A1 is set to font size 12. All remaining data is set to 10
- Ensure that column A is wide enough to accommodate the label in cell A11 and that column F is set to accommodate the text in cell F4.
- The labels in the range B4: F4 are right aligned
- Ensure that bold is applied where necessary

	A	B	C	D	E	F	G
1	**Year Mark**		**Subject**	**English**		**Year:2000**	
2	**Grade 7**						
3							
4	Surname	Term 1	Term 2	Term 3	Total	Student Average	
5	Appleby	76	74	75			
6	Arch", R	65	83	72			
7	Bester, S	71	78	75			
8	Cock, A	58	63	62			
9	De Winter, J	92	94	97			
10							
11	**Class Average**						
12							

Save the workbook as Spreadsheet1. Close the file.

7.0 REFERENCES/FURTHER READING

Ayo, S.K. (1998). *Computer Literacy Operating System and Application* (2nd ed.). Mckay Consult.

UNIT 5 ENTERING AND CORRECTING DATA

CONTENTS

1.0 Introduction
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    3.2 Replacing Cell Contents
    3.3 Changing Entries as you Type
    3.4 Entering Numbers
    3.5 Saving a File
        3.5.1 The File, Save and the File, Save as… Commands
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

You will learn here how to enter data Excel worksheet.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- create your own workbook in Excel
- replace text in a cell
- correct an entry before entering it
- enter numbers.

3.0 MAIN CONTENT

3.1 Entering and Correcting Data

3.1.1 Suggested Steps for Creating a Worksheet

First, consider your objectives for creating a worksheet and the type of information you want to include. Get some idea of how you want the worksheet to look. For example, do you want the months to appear across a row or down a column?

You might find it helpful to sketch a draft on a piece of paper to create the structure before you begin typing data. When you are entering data in an Excel worksheet, the suggested order is:

1. Type the text information to create a structure.
2. Type the numbers
3. Add the formulas, copying where possible
4. Add a title to the top of the worksheet
5. Format the text, numbers, and formulas.

3.1.2 Entering Data

To create your own workbook in Excel, you will need to enter data. To enter data:

1. Select, or activate, the cell in which you want to display the data; use the mouse pointer to point to a cell and then click to select it or use the arrow movement keys on your keyboard to select a cell.
2. Type the data.
3. Enter the data into the cell by using any of these techniques:

- press the **<Enter>** key;
- click on the **<Enter>** button in the formula bar (the boxed checkmark);
- or press any of the keyboard movement keys, such as **<Right Arrow>** or **<Tab>**.

Worksheet cells can contain constant values (text or numbers) or formulas. In a worksheet, text is used to organize and identify the numerical information. By default, text is left aligned in the cell.

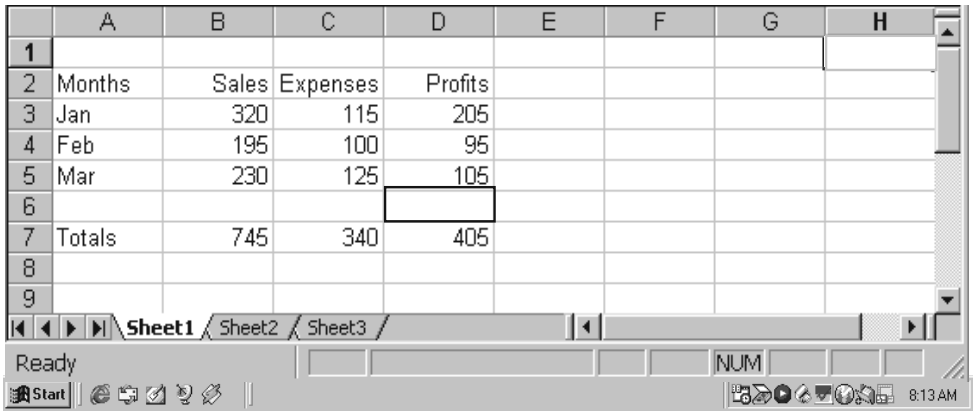
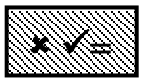


Figure 5.1: *An example of text and number entered in a worksheet*

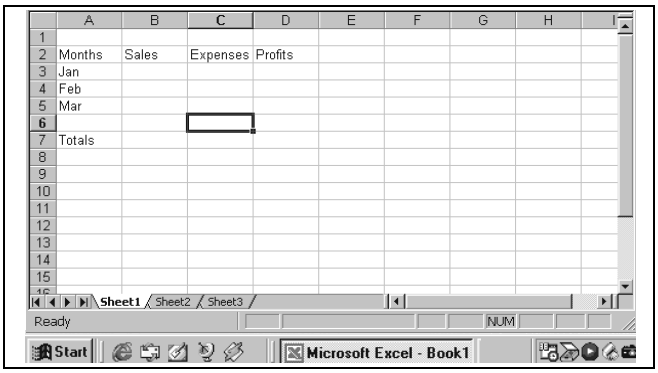
SELF ASSESSMENT EXERCISE 1

Entering Text

What you do	Comments/Prompts
1. Look at the mode indicator	(Located in the left corner of the status bar). The mode is Ready.
2. Place the mouse pointer on Cell A2.	 The mouse pointer becomes a cross. You click on a cell to select it.
3. Type: **Months** Do *not* press **<Enter>**	The word appears both in the formula bar and in the cell, but it is not yet entered.
4. Note the **Cancel, Enter,** and **Edit Formula** buttons	 Located in the formula bar. They are used for data entry with the mouse.
5. Press: **<Enter>**	To enter the text and move down one cell. Cell A3 is now the active, or selected cell. The mode indicator returns to Ready.
6. Select cell B2	You can either click on the cell or use the Right Arrow and Up Arrow keys on your keyboard to select cell B2.
7. Type: **Sales** Press: **<Enter>**	To enter the text into cell B2

Further Practice Exercise

1. Enter the following information in cell listed:
   In cell C2, enter **Expenses**
   In cell D2, enter **Totals**



3.2 Replacing Cell Contents

One method you can use to correct an item after it is entered into a cell is to retype the entry and press **<Enter>** again. The new entry replaces the old entry.

SELF ASSESSMENT EXERCISE 2

Replacing Text in a Cell

What you do	Comments/Prompts
1. Select cell D2	
2. Type: **Profits**	The new text is displayed in the formula bar and in the cell.
3. Press: **<Enter>**	The word "Profit" replaces the word "Total", and the active cell moves to cell D3.

3.3 Changing Entries as you Type

To change an entry before it is entered into a cell:

- Press **<Backspace>** to delete individual characters.
- Press **<Esc>** or click on the Cancel button (the X in the formula bar) to clear the entire entry.

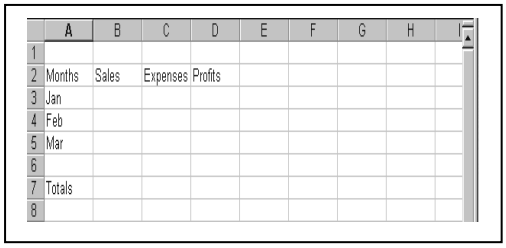
SELF ASSESSMENT EXERCISE 3

Correcting an Entry Before Entering it

What you do	Comments/Prompts
1. Select cell A4 Type: **January** Do *not* press **<Enter>**	
2. Press: **<Esc>**	The text in the formula bar and in cell A4 is erased.
3. Select cell A3	
4. Type: **January** Do *not* press **<Enter>**	
5. Press: **<Backspace>** 4 times	To erase the letters "uary."
6. Press: **<Enter>**	The text "Jan" is entered into cell A3 and the active cell is now A4.

Further Practice Exercise

1. Enter the following information in the cells listed:
   In cell A4, enter **Feb**
   In cell A5, enter **Mar**
   In cell A7, enter **Totals**



	A	B	C	D	E	F	G	H
1								
2	Months	Sales	Expenses	Profits				
3	Jan							
4	Feb							
5	Mar							
6								
7	Totals							
8								

3.4 Entering Numbers

By default, numbers are displayed right aligned as you type them.

SELF ASSESSMENT EXERCISE 4

Entering Numbers

What you do	Comments/Prompts
1. Select cell B3	
2. Type: **120** Press: **<Enter>**	The Sales, Expenses, and Profits represent thousands of dollars.
3. Observe the number in the worksheet	Numbers are right aligned in the cell.

Further Practice Exercise

1. Enter the following numbers in the cells listed:
   Cell B4, enter **195**
   Cell B5, enter **230**
   Cell C3, enter **115**
   Cell C4, enter **100**
   Cell C5, enter **125**

	A	B	C	D
1				
2	Months	Sales	Expenses	Profits
3	Jan	320	115	
4	Feb	195	100	
5	Mar	230	125	
6				
7	Totals	745	340	

3.5 Saving a File

3.5.1 The File, Save and the File, Save as… Commands

Until it is saved, a workbook exists only in computer memory, which is a temporary storage place. For permanent storage, a workbook must be saved to a disk. It is important to save your work frequently (every 10 to 15 minutes).

Although it is not necessary, if you select cell A1 before saving the file, the upper-left corner of the active worksheet will be displayed when the file is reopened. This helps you to orientate yourself when you are working with a large worksheet.
Choose **File, Save** to save changes to an existing workbook.

Choose **File, Save As** to save a file for the first time, or to save the changes in a file with a different name (other than the one specified in the title bar), in a different location, or in a different format.

Remember, as you learned in Module 2 Filenames can contain up to 255 characters (letters, numbers, and some symbols), including spaces. You can make the filenames as descriptive as you like.

To choose the correct file location when using the **Save As** dialog box, expand the **Save In** list box and select the appropriate folder.

SELF ASSESSMENT EXERCISE 5

Saving the Workbook file

What you do	**Comments/Prompts**
1. Click on the **File** menu command and observe the available choices without moving the mouse pointer	Not all menu choices are displayed initially.
2. Leave the mouse pointer on the **File** command in the menu bar	If you rest the mouse pointer on the **File** command and wait briefly after opening the menu, additional menu choices are listed. Note that the **Save Work- space…** and **Properties** options have now appeared.
3. From the **File** menu, choose **Save As…** The Save In dialog box should be set to A: If it is not, please click on the down arrow of the Save In box and select A:	The Save As command is used to save a file for the first time. When first installing Excel, the default folder is **My Documents**, located on the hard drive. However, on your computer the default folder may been changed to A:
4. Type: **My Sales Report** in the File name box	
5. Click on the **Save** button in the lower corner of the dialog box.	Excel saves a copy of the file in the default folder. This enables you

	to continue working with same file.
6. Observe the title bar (at the top of the window)	The file's new name, **My Sales Report,** is displayed.

4.0 CONCLUSION

Worksheet cells can contain constant values or formulas.

5.0 SUMMARY

Creating a worksheet involves steps. In fact entering data, entering text, replacing text in a cell etc. also involve steps which you need to follow.

6.0 TUTOR-MARKED ASSIGNMENT

Create the spreadsheet below taking special note of the following using Microsoft Excel.

Open the file Spreadsheet 1
Create a formula in cell E5 to calculate the total marks obtained by Appleby, P. (The correct answer is 225). Enter similar formulas to obtain totals for the remaining pupils.

If F5 enter a formula to calculate the average mark obtained by Appleby, P. (The correct answer is 75). Enter similar formulas to obtain the average mark of each of the remaining pupils.

Enter formulas in the range B11:F11 to complete the set spreadsheet. If you have a printer, please print the spreadsheet. Save and close the file.

7.0 REFERENCES/FURTHER READING

Ayo, S.K. (1998). *Computer Literacy, Operating System and Application* (2nd ed.). McKay Consult.

MODULE 4

Unit 1 Using Formulas
Unit 2 Spreadsheets: Numeric Formats
Unit 3 Creating Charts
Unit 4 Charts from Non-adjacent Data, Embedded Charts and Chart Links
Unit 5 Chart Types

UNIT 1 USING FORMULAS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
- 3.1 Using Formulas
  - 3.1.1 Mathematical Operators
- 3.2 Clearing Cell Contents
- 3.3 Using Undo
- 3.4 File Handling Techniques
  - 3.4.1 Closing Files
  - 3.4.2 Creating a New Workbook
- 3.5 Formatting a Worksheet
  - 3.5.1 Working with Ranges
  - 3.5.2 Using Toolbar Buttons to Format a Worksheet
  - 3.5.3 Adding Border and Colour to Cells

4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Here you will learn how to enter formulas, clear contents of a cell and use the UNDO button. You will be able to change text appearance.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- enter formulas
- clear contents in a cell
- close workbooks
- use button to change text appearance
- add borders and colour.

3.0 MAIN CONTENT

3.1 Using Formulas

Formulas are instructions that you enter to perform calculations.

You can create formulas by using numbers (for example, 350+450); however, it is preferable to construct formulas that refer to worksheet cells. This way, the results of the formulas update automatically when you change numbers in your worksheet. In Excel, you create formulas by preceding the expression with an equal sign (=). For example, if you were to enter the number 350 in cell B1, the number 450 in B2 and the formula = B1 + B2 in cell, the value 800 would displayed in cell B3. were you subsequently to change the value in cell B1 or B2, Excel would recalculated the value of cell B3.

When entering a formula, you can type in cell references or click on the desired cells. Clicking on the cells may eliminate typing errors and prevent mistakes as you determine the cell reference by looking at them.

3.1.1 Mathematical Operators

The mathematical operators that are used in an electronic environment differ slightly from those used manually. Table 1 below compares the symbols used.

FUNCTION	MANUAL	COMPUTER
Division	÷	/
Multiplication	X	*
Addition	+	+
Subtraction	–	–

Table 1: Mathematical Operators

In the above table the two shaded operators are those that require your special attention. The symbol used to indicate exponentiation (i.e to the power of) is the caret (Ù) symbol.

MANUAL	COMPUTER	RESULT
10^2	10^2	100
10^3	10^3	1000

Table 2: Exponentiation

In the next exercise you will practice entering some formulas

SELF ASSESSMENT EXERCISE 1

Entering Formulas

Objective: To use cell referencing in formulas.

What you do	**Comments/Prompts**
1. Selects cell B7	
2. Type: = **b3+b4+b5** Press: **<Enter>**	To add the numbers in cells B3, B4, and B5 and display the sum in the active cell (B7)
3. Look at the current value in cell B7	The value is 545.
4. In cell B3, enter **320** Press: **<Enter>**	The result of the formula in cell B7 reflects this change
5. In cell D3, enter the formula =**b3-c3** Press: **<Enter>**	To calculate January's Profits by subtracting Expenses (C3) from Sales (B3).

Further Practice Exercise

1. Enter following formulas in
   The cells listed:
   In cell D4, enter = **b4 – C4**
   In cell D5, enter = **b4 – C5**
   In cell C7, enter = **c3 + c4 + c5**
   In cell D7, enter = **d3 + d4 + d5**

	A	B	C	D
1				
2	Months	Sales	Expenses	Profits
3	Jan	320	115	205
4	Feb	195	100	95
5	Mar	230	125	105
6				
7	Totals	745	340	405

3.2 Clearing Cell Contents

To remove the contents of a single cell, select the cell and press **<Delete>.**

3.3 Using Undo

To reverse you last action in Excel, click on the **Undo** button (or choose **Edit, Undo)**. The speed key combination **<Ctrl + Z** will have the same effect.

Note: Not all actions can be undone in Excel. For example, you cannot undo a **File, Save**.

SELF ASSESSMENT EXERCISE 2

Clearing the Contents of a Cell; Using the Undo Button

What you do	Comments/Prompts
1. Selects cell A2	This cells contains the text "Months" This text is not needed in the worksheet.
2. Press: <Delete>	To clear the contents of cell A2
3. Click on the Undo button	 To undo the deletion of the word Months.

3.4 File Handling Techniques

This section recaps on a few of the basic file handling techniques that you were introduced to in Module 3.

3.4.1 Closing Files

To close a single file, choose **File, Close.**

SELF ASSESSMENT EXERCISE 3

Closing Workbooks

What you do	Comments/Prompts
1. Choose: **File, Close**	A message appears asking if you would like to save changes to **My Sales Report.**
2. Click on Yes	To save and close the file

3.4.2 Creating a New Workbook

When you launch Excel, you see a new, blank workbook called Book 1, However, should you require a new workbook at a later stage you do not have to restart Excel to get a new workbook. To create a new workbook without restarting Excel, click on the New button, or choose **File, New** …. The speed key combination of **<Ctrl> + N** will have the same result.

SELF ASSESSMENT EXERCISE 4

Creating a New Workbook

What you do	Comments/Prompts
1. Click on the New button	 You can use the New button to create a new workbook either when no other files are open or when you have another file open.
2. Close the file	

3.5 Formatting a Worksheet

Formatting changes the way that numbers and text are displayed in the worksheet. For example, the number ten can appear as 10, 10.00, R10, and so on. Applying a format changes only the appearance of a number, not its value. You can change the appearance of text on a worksheet in a number of ways, for example, you can emphasize certain words by applying boldface or underlining.

Categories of *Formatting* may be summarized as follows:

Number	:	Changes the way numbers, dates and times are displayed
Alignment	:	Governs where data is positioned within a particular cell
Font	:	Controls the style and typeface of data
Border	:	Applies and controls the style of lines which are drawn around cells
Patterns	:	Used to add a shaded colour or pattern to the background of a cell

In addition to the above, setting column-widths and row-heights are also considered part of formatting a worksheet. On this course we will investigate some of the font style options as well as number, alignment, border and patterns formatting briefly.

3.5.1 Working with Ranges

A range is a group adjacent cells that forms a rectangular shape. Before you can use a cell or a range of cells in a worksheet, it is necessary to indicate which cell or range of cell you want to work with. This process is known as **selecting**. So far you have only been working with a single

cell at a time. It may be necessary to work with more that one cell at a time, for example when formatting.

Selecting Cells

There are various methods that may be used to select a range of cells. Two of these are as follows:

1. With the mouse pointer, point to the centre of the cell in one corner of the range; press and hold the mouse button while dragging to the opposite corner of the range; and release the mouse button.
2. Select one corner of the range; press and hold the **<Shift>** key; and click on the opposite corner of the range to select all cells in between.

3.5.2 Using Toolbar Buttons to Format a Worksheet

You can use button on the Formatting toolbar to quickly change the appearance of all or part of a worksheet. Select the cell or cells whose appearance you would like to change, and then click on the buttons of your choice. For example, to apply boldface to text in cell B5, select cell B5 and then click on the Bold button.

Some Formatting button are toggles. To remove the formatting after it has been applied, select the cell whose formatting you would like to remove, and click on the corresponding button on the Formatting toolbar.

In Exercise 5 below you will have the opportunity to practice applying bold, italic and underline font styles to cells.

SELF ASSESSMENT EXERCISE 5

Using Buttons on the Formatting Toolbar to change Text Appearance

What you do	**Comments/Prompts**
1. Open **Australian And European Divisions' Report**	
2. Select cell B1	
3. Click on the **Bold** button	 (On the Formatting toolbar.) To make the text boldface. The buttons on the Formatting toolbar appear

	"pushed in" when they are selected.
4. Select cell B3	
5. Click on the **Italic** button On the Formatting toolbar, click on the **Italic** button again	 To remove the Italic attribute. The buttons on the Formatting toolbar are toggle buttons.
6. Select the range **C12: G16**	
7. Click on the **Underline** button	 (On the Formatting toolbar.)

3.5.3 Adding Border and Colour to Cells

To emphasize data, you can add borderline or colour to cells. A variety of border types, widths, and colours are available in Excel. To apply borders or colours, select the cells that you want to affect; click on the drop-down arrow next to the Borders or Fill Colour buttons on the Formatting toolbar; and selected an option from the palette.

SELF ASSESSMENT EXERCISE 6

Adding Borders and Colour

What you do	**Comments/Prompts**
1. If necessary, select the range	
B12:G16	
2. In the Formatting toolbar, click on the down-pointing arrow beside the Borders button	 If necessary, use the More Buttons button.
3. Click on the Outside Borders button	 (In the third row down, the third column from the left.)
4. With the range B12: G16 still selected, on the Formatting toolbar, click on the down Arrow beside the Fill Colour **button**	 To display the palette of available colours.
5. Select the colour Turquoise	Use Screen Tips to identity each color.
6. Deselect the range (click on any cell)	To view the formatting.

4.0 CONCLUSION

Formulas are used to perform calculations.

5.0 SUMMARY

You are now in a position that you can enter formulas, clear contents, of a cell, close workers and add borders and colour.

6.0 TUTOR-MARKED ASSIGNMENT

Open the file **Spreadsheet 2**. Apply the following formatting options:

- Apply outside border to the range A3:D8
- Apply a bottom border to the range A7:D7
- Apply a bottom border to the range A3: D3
- Apply the fill colour of your choice to the range A3: D3
- Print, Save and Close the Workbook.

7.0 REFERENCES/FURTHER READING

Ayo, S. K. (1998). *Computer Literacy, Operating Systems and Applications.* (2nd ed.). Mckay Consult.

UNIT 2 SPREADSHEETS: NUMERIC FORMATS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Numeric Formats
        3.1.1 Selecting the Entire Worksheet
        3.1.2 Categories of Numeric Formats
        3.1.3 Details of Numeric Formats
    3.2 Text and Number Alignment
        3.2.1 Aligning Cell Contents
    3.3 Column Widths
    3.4 Row Heights
    3.5 Printing
        3.5.1 Printing the Active Worksheet
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

In this unit you will be exposed to categories of numeric formats, text and number alignment and printing.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- format a cell
- align text in a cell
- change column widths
- change row heights
- print the active worksheet.

3.0 MAIN CONTENT

3.1 Numeric Formats

3.1.1 Selecting the Entire Worksheet

You can select the entire worksheet by clicking on the Select All button, which is the intersection of the row and column headings in the upper-left corner of the worksheet.

3.1.2 Categories of Numeric Formats

Many number formats can be applied by using the Formatting toolbar. Number formats are divided into several categories, such as Currency, Percentage, Scientific Accounting, and Fraction. The options not available on the toolbar may be selected through the Format Cells dialog box (accessed from either **Format** menu or the shortcut menu).

3.1.3 Details of Numeric Formats

You can use Excel's built-in formats to change the appearance of numbers. In the Format Cells dialog box, select the Number tab and choose the options you would like to use and click on OK. Some of the commonly used numeric formatting options may also be accessed using the formatting toolbar.

Figure 1 below indicate the button available on the Formatting toolbar by default.

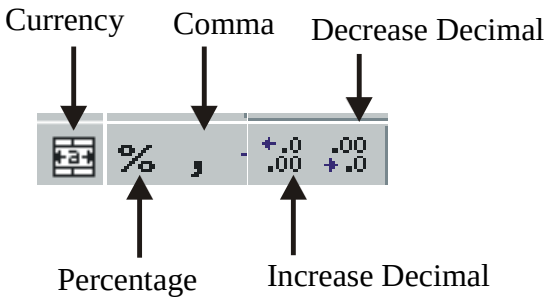


Figure 2.1: Formatting Tools

The numeric formatting buttons as listed in Figure 1, are used to produce the following formats:

Currency

Applies a currency symbol to a cell or range of cells.

Percentage

Multiplies the cell contents by 100 and place a % symbol to the right of the number

Comma

Enable two formatting features. Firstly, all negatives will be displayed in brackets. Secondly, a comma (or space – depending on the settings of

your computer) will appear as a separator between millions and thousands. For example, 1000000 will be displayed as 1,000,000 or 1 000 000.

Increase Decimals

Each time you click on the Increase Decimal button, an extra decimal place is displayed to the right of the decimal point.

Decrease Decimals

Each time you click on the Decrease Decimal button, one decimal place fewer is displayed.

SELF ASSESSMENT EXERCISE 1

Formatting a Cell

What you do	Comments/Prompts
1. Select cells C12:G12	
2. Click on the Increase Decimal button.	All values in the range are displayed with 2 decimal place.

3.2 Text and Number Alignment

3.2.1 Aligning Cell Contents

You can change the alignment of text or numbers in a cell. Right aligned, left aligned, and centered are the most common alignments. To align the contents of a cell, select the cell and then click on the desired Formatting toolbar button.

By default, text entries are left aligned while numeric entries and calculated results are right aligned. This may lead to data that does not appear neatly aligned within your spreadsheet. When attempting to correct this, the most favourable option would be to re-align the label entries, not the values.

Figure 2 below displays three examples. Example 1 shows the data as originally entered. Example 2 shows the data with the numbers having been re-aligned, while Examples 3 shows the data with the text in cell B1 having been re-aligned. While all three examples display the correct information, Example 3 is visually the most successful.

Example 1

	A	B
1		**Jan**
2	*Model 1*	10
3	*Model 2*	1000
4	*Model 3*	100
5	*Model 4*	1
6	*Model 5*	110
7	**Total**	1221
8		

Example 2

	A	B
1		**Jan**
2	*Model 1*	10
3	*Model 2*	1000
4	*Model 3*	100
5	*Model 4*	1
6	*Model 5*	110
7	**Total**	1221
8		

Example 3

	A	B
1		**Jan**
2	*Model 1*	10
3	*Model 2*	1000
4	*Model 3*	100
5	*Model 4*	1
6	*Model 5*	110
7	**Total**	1221
8		

Figure 2.2: Data Alignment

SELF ASSESSMENT EXERCISE 2

Aligning Text in a Cell

What you do	**Comments/Prompts**
1. Select the range C5: G5	
2. Click on the **Align Right** button	 (On the Formatting toolbar.) To align the text in the selected range along the right edge of the cells.

3.3 Column Widths

If the number in the active cell is too wide for the column, the column width will adjust automatically so that the number is displayed. You can also change the width of worksheet columns manually. There are several ways, including the following:

- Place the mouse pointer on the boundary to the right of a column heading, and drag the divider to the right (to expand the column width) or to the left (to shrink the column width).

- Place the mouse pointer on the boundary to the right of a column heading and double-click the mouse button. The column width is calculated to accommodate the longest entry in the column.

When the total (number of characters of numeric data is greater than the column width, number signs (# # # # #), commonly referred to as “hash” symbols, are displayed in the cell if you have manually changed the column width. To display the number, you can change the formatting or enlarge the width of the column.

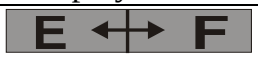
3.4 Row Heights

Just as the default column width may not always be suitable, so too you will find that the default row height may not always be to your liking. Although the row height will adjust automatically to accommodate the font size of a particular cell, you may wish to change the height of worksheet rows manually. There are several ways, including the following:

- Place the mouse pointer on the boundary below the row heading, and drag the divider down (to increase the row height) or up (to decrease the row height).
- Place the mouse pointer on the boundary below the row heading and double-click the mouse button. The row height is calculated to accommodate the highest entry in the row.

SELF ASSESSMENT EXERCISE 3

Changing Column Widths and Row Heights

What you do	**Comments/Prompts**
1. Select cell E12	It displays the result of the formula
2. In the column heading, pointer to the boundary between the headings for column E and F.	
3. Drag the boundary to the left until the tip displays 3.57	To decrease the width of Column E
4. Observe cell E12 Observe the formula bar	Number signs (# # #) are displayed in the cell. The formula bar displays the true contents of the cell. The contents are intact.
5. Double-click on the boundary between the headings for columns E and F	Column E is automatically sized to fit the widest number or text in the column. Next you will increase the row height of row 6 so that the spacing between rows 5 and 6 will more acceptable.
6. In the row heading, points to the boundary between the headings for rows 6 and 7	
7. Drag the boundary down until the tip display 25:50	The height of row 6 is increased

3.5 Printing

All default print options are listed in the Print dialog box. If you activate the print process through the Print button, Excel will use the default setting that appear in the print dialog box. Should you wish to change any of these setting, you would have to use the **file, prints** commands to display the Print dialog box. Figure 3 below displays the print dialog box.

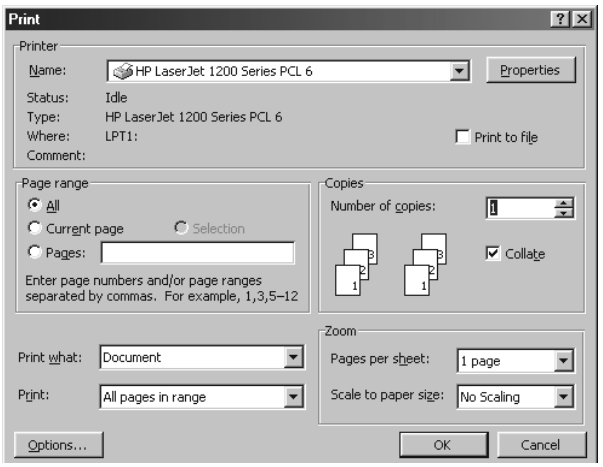


Figure 2.3 – The Print Dialog Box

Options that may be selected in the Print dialog box include the following:

Printer Name Box Use this list box select a printer.
Copies Selects the number of copies you wish to print
Print Range By default all pages of the worksheet will print. However, you can select to print specific pages only.
Print What Selection: Prints Only the area specified by you
Selected Sheet(s): Prints the current worksheet (default setting)
Entire Workbook: Prints all worksheets in a workbook

3.5.1 Printing the Active Worksheet

A quick way to print your whole worksheet is to click on the print button on the standard toolbar. **Warning** When you use this button, the print dialog box does not appear on the screen. For every click of the mouse on this button, your printer will print another copy.

SELF ASSESSMENT EXERCISE 4

Printing the Active Worksheet

What you do	Comments/Prompts
1. Click on the Print button	The Active worksheet is printed
2. Save the file and exit from Excel	

4.0 CONCLUSION

A worksheet is a single sheet of the workbook. It contains text, numbers and formulas.

5.0 SUMMARY

A workbook is Excel's name for a file. It contains three sheets. These sheets can be of different types, such as worksheets, macro sheets or chart sheets.

6.0 TUTOR-MARKED ASSIGNMENT

- Apply bold format where necessary
- Ensure that the column-widths of column A and C are adjusted as necessary
- Ensure that the values in cell C4:C8 are displayed with 2 decimal symbols
- Note that the labels in B3: D3 are right aligned.
- Enter the necessary formulas in D4:D7 to calculate the turnover of each individual item.
- Enter a formula in D8 to calculate the total turnover.
- Save the workbook as **Spreadsheet 2**
- Print and close the file.

	A	B	C	D
1	Tuck Shop Sales		Nov-00	
2				
3	Item	**Quantity**	**Price**	**Turnover**
4	Cooldrinks	300	2.50	
5	Chips	220	1.75	
6	Hotdogs	400	5.00	
7	Toasted Cheese	180	5.00	
8	**Total Price**			

7.0 REFERENCES/FURTHER READING

French, C.S. (2000). *Computer Science* (5th ed.). Gosport, Hants: Ashford Colour Press.

UNIT 3 CREATING CHARTS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Creating Chart
        3.1.1 Creating a Basic Chart
        3.1.2 Examining the Results and Learning about Chart Terminology
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

You will learn to create charts and other graphic objects using Excel in this unit.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- create column charts on chart sheets using the <F11> functions key
- apply chart terminology.

3.0 MAIN CONTENT

3.1 Creating Chart

As you learned earlier in this course, Excel 2000 is an integrated worksheet package that runs with the Microsoft Windows 95, Window 98, Windows Millennium Edition and Windows NT 4.0 operating systems. In addition to its worksheet capabilities, Excel enables you to create charts and other graphic objects.

3.1.1 Creating a Basic Chart

After you have created a worksheet, you can graphically represent the worksheet data by creating a chart. Charts often make worksheet data clearer and easier to understand.

What is a chart? It is information presented in the form of a table, graph or diagram. When using the term chart in Excel, we are specifically referring to the graph element of charting. For the duration of this course, these two terms will be used interchangeably.

What exactly is meant by the term graph? A graph is a diagram showing the relation between variable quantities, usually of two, each measured along one of a pair of axes at right angles. Pie, Doughnut and Radar graphs are a few of the exceptions where the axes are either displayed in an unusual format, or not at all.

In summary, a graph is a "pictorial" presentation of a series of values. It is not possible to plot a graph without values. The Excel spreadsheet provides the values that are to be plotted. In addition to numeric data, cells containing text will also be included in the data that is to be plotted as a graph.

Excel enables you to create charts sheets, which are separate sheets of a workbook file that contain only charts. Excel also you to create embedded charts, which are displayed on the same sheet as the worksheet.

Chart sheets enable you to print a chart that is separate from data. You can use page setup options to control how the chart will print. Creating a chart on a separate sheet is useful when you want to show overhead projections of your charts as part of a presentation or a slide show.

Use an embedded chart when you want to print a worksheet and a chart on a single sheet of paper. Embedded charts enable you to print a chart and its associated data side by side on the same printed page. It is easier to compare actual worksheet data to the graphical representation of that data when you use an embedded chart.

To create a chart on a chart sheet, you can either use the Chart Wizard or press the **<F11>** key. The Chart Wizard feature leads you through a step-by-step process to create a chart.

When you use the **<F11>** key to create a chart, Excel applies the default chart format the new chart. The default chart format is a column chart with a legend displayed and some formatting applied.

To create a chart using the **<F11>** function key, the following process applies:

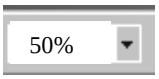
1. Create or Open the file containing the data that is to be plotted
2. Select the range containing the data that is to be included in the chart
3. Press <F11>.

SELF ASSESSMENT EXERCISE 1

Creating a Chart Using the <F11> Function Key

Before you begin: Please ensure that Microsoft Windows and Office 2000 have been installed on the hard disk and the computer is on.

Objective: To create a column chart to represent the quarterly sales data entered in the worksheet.

What you do	**Comments/Prompts**
1. Starts Excel 2000	Excel 2000 is launched
2. If necessary, close the Office Assistant	(Right-click on the Office Assistant, and choose Hide from the shortcut menu.)
3. Choose: **File, Open…**	The Open dialog box is displayed
4. In the Look in: drop-down list box, select drive **A:**	
5. Open: **Charts**	This file contains quarterly sales data for Books and Beyond, Inc.
6. Select the range: **A5:E9**	You will chart the quarterly sales data for each location.
7. Press: **<F11>**	To create the chart.
8. If necessary, choose **Selection** in the **Zoom** drop down list box in order to view the whole graph.	This box is located on the standard toolbar. 
9. Examine the sheet tabs	A new sheet named Chart1 has been inserted before the Chart Data worksheet. This sheet contains only the chart.
10. Examine the Chart toolbar	By default, the Chart toolbar is displayed when a chart is active.
11. If the toolbar is currently displayed over the graph, move or dock the Chart toolbar.	To view the entire chart.

3.1.2 Examining the Results and Learning about Chart Terminology

Figure 3.1 below shows the spreadsheet data from which the graph in Figure 3.2 below has been plotted.

When you create a chart, values from worksheet cells – or data points – create data markers that can be displayed as bars, column, lines, pie slices, or other shapes. A data marker is a chart symbol that represents a single data point.

All of the data points in a column or row on the worksheet combine on the chart to create a data series, which is displayed on the chart as a group of data markers distinguished by the same colour or pattern. For example, all of the entries in the Australia row of the worksheet correspond with the Australia data series of the chart.

	A	B	C	D	E	F
1	**Location**					**Total**
2	Australia	R1 500	R1 500	R3 000	R4 000	R10 000
3	Germany	R 1 500	R1 800	R2 600	R4 900	R10 800
4	Canada	R1 100	R1 800	R1 800	R3 900	R8 600
5	Great Britain	R 700	R1 300	R1 600	R3 400	R7 000
6	Quarter Total	R4 800	R6 400	R9 000	R16 200	R36 400
7						

Figure 3.1: Spreadsheet data used to plot the graph in Figure 3.2

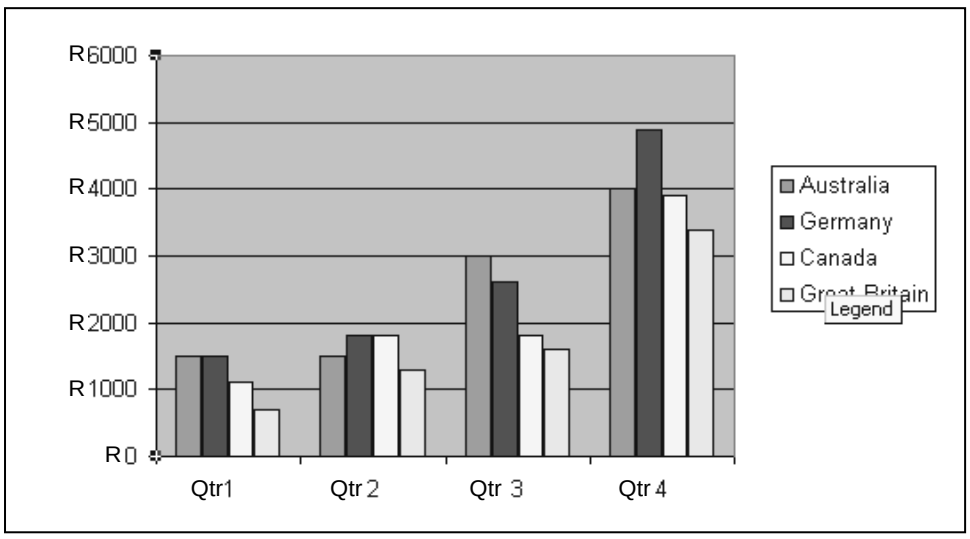


Figure 3.2: Result of graph based on selected data in Figure 3.1

A sample of each series' marker colour and pattern is displayed in the legend along with the series name (taken from the column or row of

labels in the selected range). The legend enables you to identify the series on the chart so that you can easily compare the chart with the worksheet data.

The *value axis* is typically the vertical axis on the chart. It is also known as the *y-axis.* Values for data points are plotted against this axis. The *category axis* is typically the horizontal axis on a chart. It is also known as the *x-axis.*

Category labels are plotted along the *x-axis*, and data markers for all series are grouped into these categories. *Gridlines* are lines that are drawn in the plot area, typically for the values axis, so that data marker can easily be compared with an axis value.

SELF ASSESSMENT EXERCISE 2

Applying Chart Terminology

Objective: To assign the correct label to each element of the chart shown in Figure 3.3

What you do	Comments/Prompts
1. Use the terms listed in the ***Comments/Prompts*** column on the right to label the chart shown in Figure 5.3	Data marker Data series Legend Value (Y) axis Category (X) axis Category label Gridline

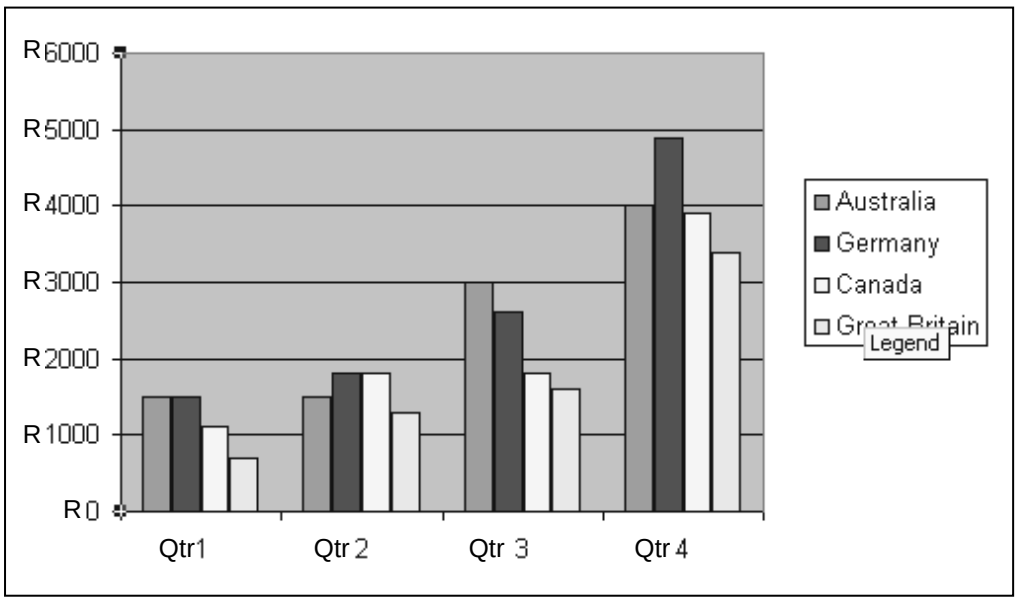


Figure 3.3: Result of graph based on selected data in Figure 3.1

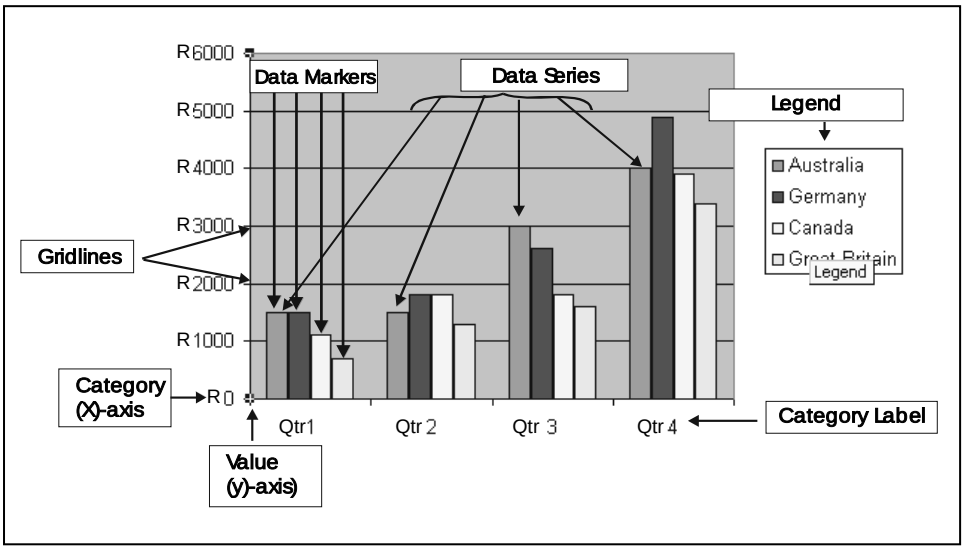


Figure 3.4: Chart Terminology

4.0 CONCLUSION

Chart sheets enable you to print a chart that is separate from data.

5.0 SUMMARY

Here you learned how to create a chart and chart terminology.

6.0 TUTOR-MARKED ASSIGNMENT

In this exercise you will make use of the spreadsheets that you created previously to generate charts and include a column chart.

Open the file Spreadsheet 1. Using the range A4: D9, please plot a column chart *without* making use of the *Chart Wizard.*

If you have a printer, please print the Chart.

7.0 REFERENCES/FURTHER READING

French, C.S. (2000). *Computer Science* (5th ed.) Gosport, Hants; Ashford Colour Press.

UNIT 4 CHARTS FROM NON-ADJACENT DATA, EMBEDDED CHARTS AND CHART LINKS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Charting Non-adjacent Worksheet Data
    3.2 Embedded Charts
        3.2.1 Creating an Embedded Chart
    3.3 Moving an Embedded Chart
    3.4 Sizing an Embedded Chart
    3.5 Deleting Chart Items
    3.6 Chart Links
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
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1.0 INTRODUCTION

Here you will learn how to create a chart from non-adjacent data on the worksheet. You will also learn how to use the Chart Wizard.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- chart non-adjacent worksheet data
- use Chart Wizard
- create a pie chart
- move an embedded chart
- delete chart items
- examine links between Worksheets data and charts.

3.0 MAIN CONTENT

3.1 Charting Non-adjacent Worksheet Data

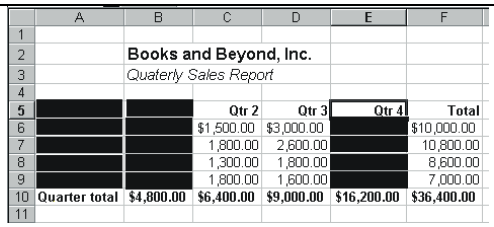
You can create a chart from non-adjacent data on the worksheet. To do so, select the first range of data, and then press the **<Ctrl>** key while you select the second range of data. Press **<F11>** to create the chart from the selected ranges.

Note: The non-adjacent selections must be valid ranges. In some cases, cells might contain text for series and category names, To chart the data correctly, select a blank cell in the upper-left corner of the range.

SELF ASSESSMENT EXERCISE 1

Charting Non-adjacent Worksheet Data

Objective: To create a column chart to represent non-adjacent worksheet data.

What you do	Comments/Prompts
1. Select the **Chart data** sheet tab (at the bottom of the screen)	To display the sheet containing the sales report. The range A5: E9 is selected.
2. Select the range: **A5: B9**	
3. While pressing **<Ctrl>,** select the range **E5: E9**	 To select the data for only Quarters 1 and 4
4. Press <F11>	To add a second chart sheet after the first, and to create a column chart representing only the Qtr 1 and Qtr 4 sales data.

3.2 Embedded Charts

The *Chart Wizard* feature leads you through a step-by-step process to create a chart and displays sample views as you build it.

3.2.1 Creating an Embedded Chart

When you use the *Chart Wizard* feature, Excel draws the chart according to the selections you make in the *Chart Wizard* dialog boxes and embeds the chart as an object on the worksheet. Embedding a chart enables you to work with it directly on the worksheet.

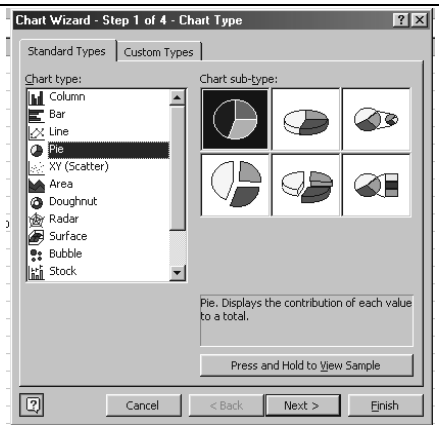
To create a chart using the *Chart Wizard* the following steps apply:

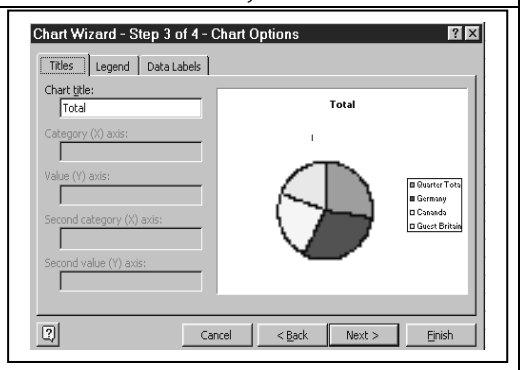
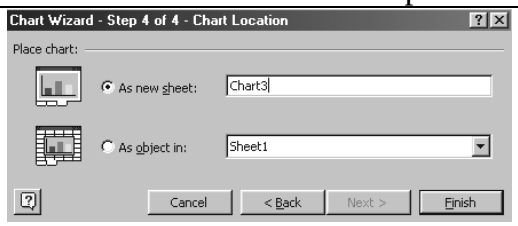
1. Create or open the relevant spreadsheets
2. Select the range containing the data to be plotted
3. Click on the *Chart Wizard* tool  located on the Standard toolbar
4. Follows the four steps as prompted by **Chart Wizard.**

SELF ASSESSMENT EXERCISE 2

Creating a Pie Chart; Reviewing the Chart Wizard Dialog Boxes

Objective: To create a chart on the same sheet as the worksheet data.

What you do	Comments/Prompts
1. Select the **Chart Data** sheet	
2. Selects the range: **A5:A9**	(The country names and the column label)
3. While pressing **<Ctrl>**, select the range F5: F9	(The totals and the column label.)
4. Click on the **Chart Wizard** button	 On the Standard toolbar, If necessary, use the More Buttons button to find it. The first of the four Chart Wizard dialog boxes is displayed. You can click on Cancel or get Help from any Chart Wizard dialog box.
5. If necessary, close the **Office Assistant**	By clicking on No, Don't Provide Help Now.
6. In the **Chart Type** list box, select **Pie**	
7. Observe the **Chart Sub-Type** options	 You can choose from several different types of pie charts
8. Press and hold the mouse button on **Press and Hold to View Sample**	To view the chart
9. Release the mouse button	

10. Click on **Next>**	 To second step (Chart Source Data) is displayed. The range that you selected before you clicked on the Chart Wizard button is entered in the Data Range text box as an absolute reference; it is selected.
11. Click on **Next**	 To accept the data range and move to the next step (Chart Options), which contains options for the titles, legends, and data labels.
12. Select the **Data Labels tab**	
13. Under data labels, select Show **label** and **percent**	To display the data label and percent value for each section of the pie.
14. Click on **Next>**	 To display the fourth and last step (Chart Location).
15. Click on **Finish**	To accept the default to place the chart as an object in the Chart Data worksheet. You can now move and size the chart.

3.3 Moving an Embedded Chart

Because an embedded chart is an object on the worksheet, you can move it around the worksheet by dragging. To move an embedded chart, select the chart and drag it to another location on the worksheet. As you drag, an outline of the chart area is displayed, so that you can fit and align the chart where you want in on the worksheet.

SELF ASSESSMENT EXERCISE 3

Moving an Embedded Chart

What you do	Comments/Prompts
1. Observe the pie chart on the worksheet	Selection handles are displayed. The chart covers some of the worksheet data.
2. Move the mouse pointer over various items of the pie chart	Excel displays the name and value of each item in Screen Tip.
3. Point to a blank area of the chart	To display the Chart Area Screen Tip.
4. Drag the chart to cell **A12**	(So that its upper-left corner is in cell A 12.) The chart is now displayed below the data.
5. Click on cell **G12** to deselect the chart.	
6. Press the down arrow key until you can see the whole chart.	

3.4 Sizing an Embedded Chart

You can size an embedded chart by using the selection handles that are displayed around it when it is selected. When you place the mouse pointer on one of the selection handles the pointer changes to a two-headed arrow. You can then drag in the direction of either arrow to enlarge or reduce the size of the chart. When you size an embedded chart, its dimensions remains proportional.

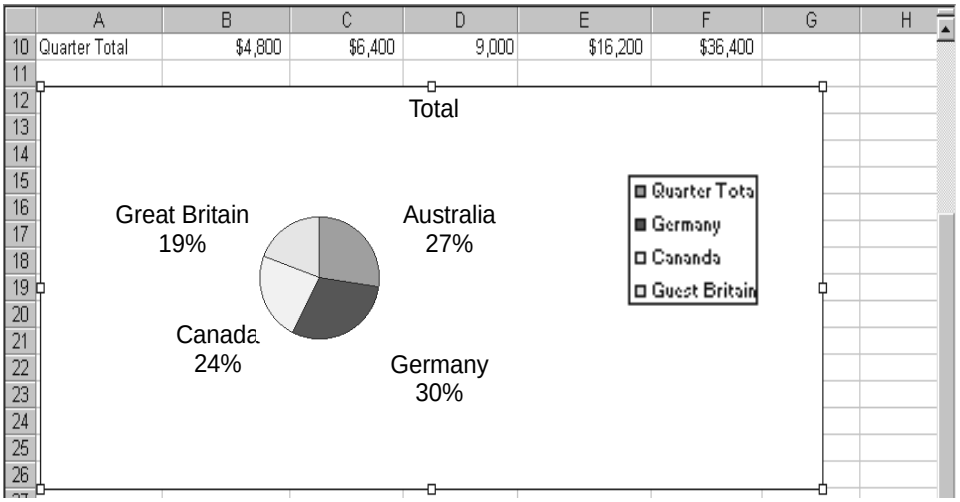


Figure 4.1 The resized embedded chart.

3.5 Deleting Chart Items

You can delete any chart item that can be selected by selecting it and pressing **<Delete>**. If you should change your mind after you have deleted a chart item, you can immediately click on the **Undo** button to reverse your action.

SELF ASSESSMENT EXERCISE 4

Sizing an Embedded Chart; Deleting the Legend

What you do	**Comments/Prompts**
1. Click on the chart to select it. Place the mouse pointer on the selection handle in the lower-right corner of the chart.	 The mouse pointer changes to a two-headed arrow.
2. Press the mouse button down and Drag the selection handle to cell **G26** – release the mouse button.	To enlarge the embedded chart.
3. Click once on the chart legend	To select it
4. Press **<Delete>**	To delete the legend. In this case because the chart and its labels are self-explanatory, the legend is superfluous.
5. Save the file as: **My Charts**	(Choose **File, Save As**)

3.6 Chart Links

When you create a chart worksheet data, Excel creates an active link between the worksheet values and the chart data points. When you change a worksheet value, the chart data point updates. The link to worksheet data is the same whether a chart is embedded or is stored on a chart sheet.

SELF ASSESSMENT EXERCISE 5

Examining the Link between Worksheet Data and Charts

What you do	Comments/Prompts
1. Select cell **D6** Observe its current values	(R3,000)
2. Change the value to 20000	
3. Observe the change in the **Australia** section of the pie chart	It increased from 27 percent to 51 percent. The embedded chart data markers are linked to the worksheet data.
4. Select the Chart 1 sheet	
5. Observe the change in the **Qtr 3 Australia** section of the chart	The chart sheets are also linked to the worksheet data from which they were created.
6. Select the **Chart Data** sheet	
7. Click on the **Undo** button	 The Australia section returns to 27 percent.
8. **Save** the file	The embedded chart is part of the worksheet. The worksheet and chart sheets are saved as part of the workbook file.
9. **Close** the file	

4.0 CONCLUSION

Excel draws the chart according to the selections that is made in the Chart Wizard dialog boxes.

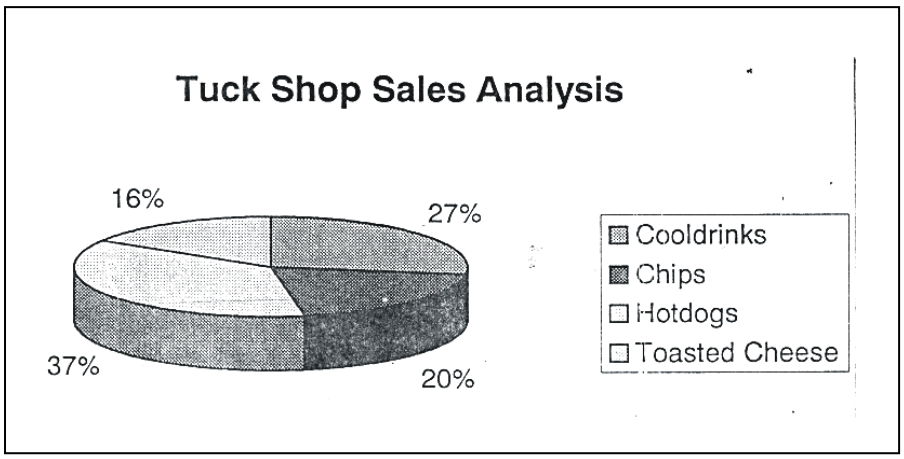
5.0 SUMMARY

Excel could be used to draw charts and Excel creates an active link between the worksheet values and the chart data points.

6.0 TUTOR-MARKED ASSIGNMENT

A pie graph will illustrate the percentage contribution of each food item available in the school tuck shop. You will use the data in Spreadsheet to plot an embedded pie chart.

Open the file Spreadsheet 2. Employing the *Chart Wizard* plot an embedded 3-D Pie chart using the range A4: B7. The end result should be similar to the chart below and should appear in range A10: F23.



7.0 REFERENCES/FURTHER READING

French, C.S. (2000). *Computer Science* (5th ed.). Gosport, Hants: Asford Colour Press.

UNIT 5 CHART TYPES

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Chart Types
        3.1.1 Changing Chart Types
    3.2 Formatting the Chart
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        3.2.3 Formatting Data Markers
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1.0 INTRODUCTION

Excel provides many different chart types to choose from. A chart selection is based on the type of data that you putting in a chart.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- change the chart type
- add a border to the chart title
- format the plot area
- format the data markers
- print the formatted chart.

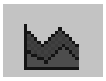
3.0 MAIN CONTENT

3.1 Chart Types

Excel provides many different chart types to choose from. The type of chart you use depends on the type of data you are charting.

3.1.1 Changing Chart Types

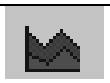
You can change the chart types by clicking on the downward-pointing arrow next to the Chart Type button on the Chart toolbar.

 ← Chart type button

A drop-down menu including buttons for 18 different chart types is displayed. Click on the button that corresponds to the chart type of your choice.

SELF ASSESSMENT EXERCISE 1

Changing the Chart Type

What you do	**Comments/Prompts**
1. Open: Modified Charts.xls	(Located on the disk in drive A:)
2. Select the **Chart – All Qtrs** sheet	
3. Point to the Chart Type button	 (On the Chart toolbar.)
4. Click on the drop-down arrow next to the Chart Types button.	To display a menu of chart types 
5. Click on the **Bar Chart** button	
6. Observe the chart	The chart has changed from the default column chart to a bar chart.
7. Observe the Chart Type button	It displays the chart type that was last selected.
8. Click on the Chart Type drop-down arrow.	(Next to the Chart Type button.)
9. Click on the 3-D Column Chart button	
10. Observe the chart	The chart has changed from the bar chart to a 3-D column chart. Depending on the size of your monitor, some of the data markers, might not be visible
11.Close the file without saving	

3.2 Formatting the Chart

To make you charts more attractive, you can add formatting to chart items. It is possible to add border around the titles, the legend, and the text boxes. In addition to this, the colour, thickness, and style of the border, as well as the colour of the area within the border can be changed.

3.2.1 Accessing Format Dialog Boxes

Each item on a chart has its own unique formatting dialog box, which contains options specific to that particular item. The easiest method available for accessing the format dialog boxes is simply to double-click on the item.

In Exercise 19, you will be required to add a border to the Chart Title. The Format Chart Title dialog box consists of three page tabs, **Patterns**, **Font**, **Alignment** as shown in *Figure* 5.1 below.

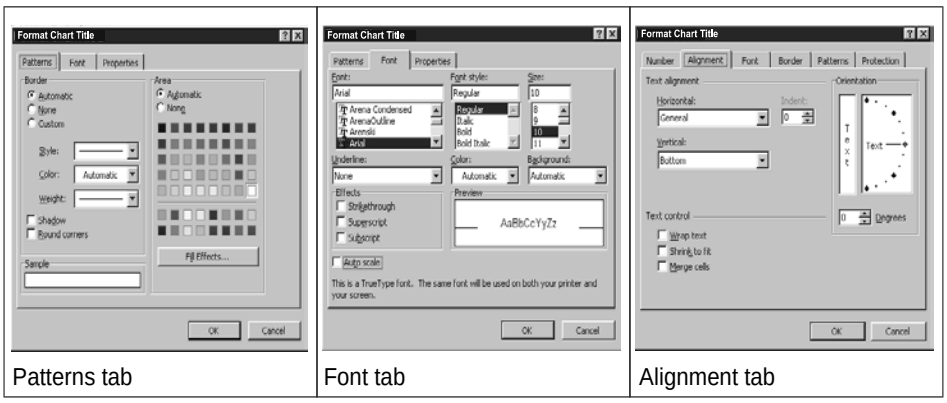


Figure 5.1: Format Chart Title tabs

SELF ASSESSMENT EXERCISE 2

Adding a Border around the Chart Title

What you do	Comments/Prompts
1. Open: **Format. xls**	Remember that you are working on the data disk in drive A:
2. Select the **Chart-All Qtrs** sheet	
3. Right-click on the chart title	(Book and Beyond, Inc.) To select it and display the shortcut menu.
4. Choose: **Format Chart Title…**	To display the Format Chart Title dialog box.

5. Verify that the **Patterns** tab is selected.	
6. Under **Border, select** Custom	
7. From the **style**: drop-down list, Select a style of your choice	The Sample box displays the new border style.
8. From the **Color:** drop-down list, Select a color of your choice	The sample box displays the new border colour.
9. From the **Weight**: drop-down list, Select a weight of your choice	The Sample box displays the new line width.
10. Click on **OK**	
11. Press: **<ESC>**	To deselect the chart title and view the chart.

3.2.2 Formatting the Plot Area

The plot area is the gray background behind the chart. For printing or presentation purposes, you might need to format the plot area to make it easier to view the information it contains. The Format Plot Area dialog box contains a single tab, namely the Pattern tab, only.

To format the plot area:

1. Double-click on the area to display the Format Plot Area dialog box
2. Select a border style, a colour and weight, and area colour, pattern, and border.

SELF ASSESSMENT EXERCISE 3

Formatting the Plot Area

Objective: To change the gray background of the plot area to white.

What you do	**Comments/Prompts**
1. Double-click on the gray chart background.	The Format Plot Area dialog box is displayed
2. Under **Border,** from the **Color** drop-down list, select black.	
3. Under **Area,** from the colour palette, select white	
4. Click on OK	The chart background is white

3.2.3 Formatting Data Markers

To enhance the appearance of a chart, you apply different colours and patterns to the data markers for each series. You might find it useful to format data markers with patterns when you are printing to non-colour printers or when you are printing charts that you plan to use as overheads.

To change the format of a data series:

1. Double-click on one of the markers for the series to display the Format Data Series dialog box
2. Select the appropriate options
3. Click OK

SELF ASSESSMENT EXERCISE 4

Formatting the Data Markers

What you do	**Comments/Prompts**
1. Double-click on any one of the Australia data marker	The Format Data series dialog box is displayed. The patterns tab is selected.
2. Under **Border**, from the Color drop-down list, select a border colour	
3. From the **Weight** drop-down list, select the thickest line	
4. Under **Area**, click on Fill Effects....	The Fill Effect dialog box is displayed
5. Select the Pattern tab	
6. Under **Pattern**, select the pattern of your choice	
7. Select foreground and background colours	Assign the same colour as the border colour to one, and assign a contrasting colour to the other.
8. Click on **OK**	To accept the Fill Effects options. The pattern is displayed in the Sample box.
9. Click on **OK**	

3.3 Previewing and Printing Charts

3.3.1 Print Preview

The Print Preview command enables you to view your printouts on screen before you print them. By using this tool, you can adjust the print settings before you send your print job to printer. To activate the Print Preview command you may

1. Select **File, Print Preview**
2. Click on the Print Preview tool on the Standard toolbar.

3.3.2 Printing a Chart

It is possible to print a chart sheet, an embedded chart separately or the embedded chart as part of the worksheet.

To print a chart sheet:

1. Select the chart sheet
2. Select **File, Print…**
3. Click on **OK**

To print an embedded chart as part of the worksheet:

1. Verify that the embedded chart is not selected
2. Select **File, Print…**
3. Click on **OK**

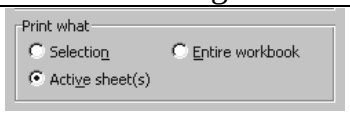
To print an embedded chart by itself:

1. Select the embedded chart
2. Select **File, Print….**
3. Click on **O**

SELF ASSESSMENT EXERCISE 5

Previewing and Printing the Formatted Chart

What you do	Comments/Prompts
1. Click on the Print Preview button	
2. Place the mouse pointer over any portion of the previewed chart	The mouse pointer changes to a magnifying glass.
3. Click on any portion of the	That portion of the chart is

chart	magnified.
4. Click on the Chart	To restore the preview to its previous size
5. Click on the **Close** button on the preview toolbar to close Print Preview.	
6. Choose: **File, Print**…	The Print dialog box is displayed.
7. Under **Print what**, observe the options.	 Active Sheet(s) is selected **NB:** If you do not wish to print at this time, please select cancel and omit step 8 below
8. Click on **Ok**	The Chart is printed
9. Save the file	
10. Exit from Excel	

4.0 CONCLUSION

A legend is used to identify each series in a chart. It contains a sample of the marker colour and pattern of each series.

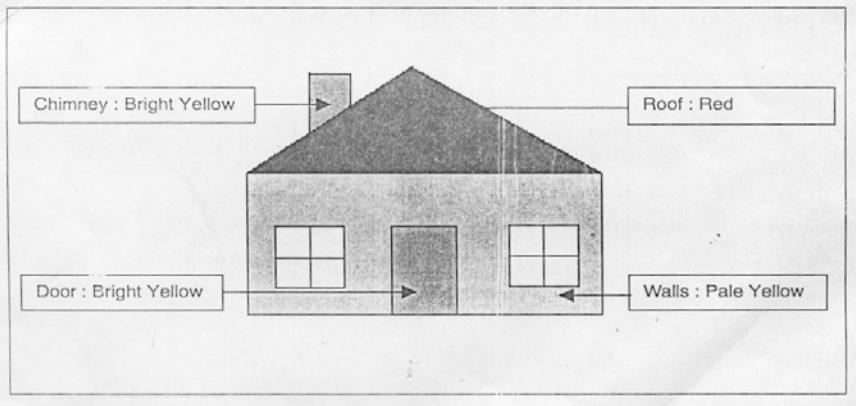
5.0 SUMMARY

The plot area is the gray background behind the chart. The Format plot Area contains a single tab i.e. the patterns tab.

6.0 TUTOR-MARKED ASSIGNMENT

Using the Microsoft Paint program (located on the Accessories sub menu), please create the following picture taking care to comply with the specifications, listed below the picture.

NB: You are not required to include the text boxes or arrows. These have been included to assist you when interpreting the specifications.



Drawing

- Use the rectangle tool to draw the walls (1)
- Use the line tool to draw the roof (1)
- Use the line tool to draw the chimney (1)
- Use the rectangle tool to draw the door (1)
- Use the rectangle tool to draw the outline of the windows (2)
- Use the line tool to draw the "cross bars" in each window (2)

7.0 REFERENCES/FURTHER READING

French, C.S. (2000). *Computer Science* (8th ed.). Gosport, Hants: Ashord Colour Press. .

MODULE 5

Unit 1 PowerPoint and Presentations
Unit 2 PowerPoint Presentation Screen
Unit 3 Creating New Presentations
Unit 4 Naming Presentation, Saving Presentation and Formatting Slides
Unit 5 Using Autoshapes

UNIT 1 POWERPOINT AND PRESENTATIONS

CONTENTS

1.0 Introduction
2.0 Objective
3.0 Main Content
  3.1 Starting PowerPoint and Opening a Presentation
    3.1.1 Starting PowerPoint
    3.1.2 Opening a Presentation
  3.2 Running a Slide Show
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

In this unit you will learn what a PowerPoint is and what presentations are.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- open an existing PowerPoint presentation and view a slide show.

3.0 MAIN CONTENT

3.1 Starting PowerPoint and Opening a Presentation

PowerPoint is an application program used to create presentations. Presentations are delivered to an audience using different media such as slides, overhead transparencies, and automated shows viewed on a computer or broadcast over the Web. You create a presentation file,

which combines various objects such as text, graphs, organization charts, clip art, WordArt and templates.

3.1.1 Starting PowerPoint

To use PowerPoint, you must load the program from the hard disk into the computer's memory. You can store your data files (presentations) in a folder on the hard drive, or on a floppy disk. In order to use PowerPoint, you need to have Microsoft Windows 95, 98, Millennium Edition or NT 4.0 installed on your computer.

To start PowerPoint using the **Start** menu:

1. Turn on your computer.
2. In taskbar, click on **Start**.
3. Select **Programs** from the list of menu choices.
4. In the **Programs** sub-menu click on **Microsoft PowerPoint** to start the program.

3.1.2 Opening a Presentation

After you start PowerPoint, a dialog box is displayed that enables you to create a new presentation or open an existing presentation. To open an existing presentation:

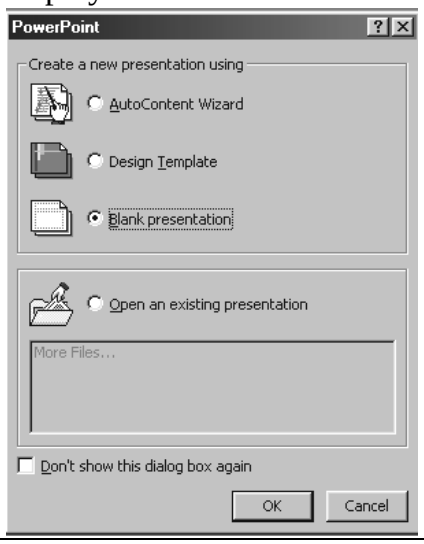
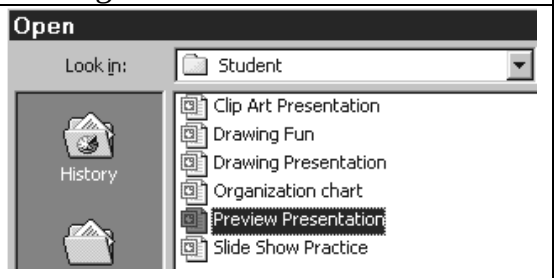
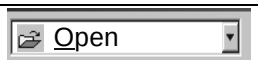
1. Select **Open an existing presentation**
2. Click on **OK**
3. In the Open dialog box that is now displayed, select the folder and filename of the presentation that you want to open.
4. Click on **Open** to open the presentation file.

SELF ASSESSMENT EXERCISE 1

Starting PowerPoint and Opening a Presentation

Before you begin: Please ensure that your computer is switched on.

What you do	Comments/Prompts
1. Click on the Start button on the Taskbar	The Start menu is displayed
2. Click on Programs on the Start menu	The Programs sub-menu is displayed

3. In the Sub-menu click on Microsoft PowerPoint	Microsoft PowerPoint is launched. This is the PowerPoint window. The PowerPoint program automatically displays the Startup dialog box for either creating a new presentation or opening an existing presentation. In addition to the PowerPoint window, the Office Assistant may be displayed. 
4. Click on the Open an existing presentation radio button	
5. Click on OK	To display the Open dialog box
6. Observe the Look In: list box at the top of the dialog box. Expand the list box and click on $3^1/_2$ Floppy (A:)	If you are unable to see a list of file names including Preview Presentation.ppt please call your training advisor for assistance.
7. In the file list box, select Preview Presentation.ppt	 A preview of the presentation is displayed to the right of the file name list box.
8. Click on Open	 To open the presentation. The first slide is displayed.

3.2 Running a Slide Show

You can display a presentation on your computer screen by running a slide show.

To run a slide show, press **<F5>**

Only one slide is displayed at a time. You can advance the slides manually, or you can have PowerPoint advance the slides automatically. To advance slides manually, click the left mouse button to move forward one slide.

To move backward one slide, click the right mouse button and choose Previous from the shortcut menu.

You can also use the **<Page Up>** and **<Page Down>** keys and the **<Up Arrow>** and **<Down Arrow>** keys to navigate through a slide show.
To end a slide show, press **<Esc>**

SELF ASSESSMENT EXERCISE 2

Running a Slide Show

Objective: To preview a completed presentation.

Before you begin: Ensure that **Preview Presentation.ppt** is open and the first slide is displayed.

What you do	**Comments/Prompts**
1. In the menu bar located at the top of the presentation window, click on Slide Show and then on View Show.	To start the slide show.
2. Observe the first slide	The title slide of the presentation fills the screen.
3. Click the left mouse button	To advance to the next slide in the presentation. The bullet slide "Why A Relocation Team?" is displayed.
4. Click the left mouse button	The third slide contains additional bullet text.
5. Click the left mouse button	The fourth slide contains drawing objects.
6. Advance to the next slide	(Click the left mouse button). The fifth slide contains clip art.
7. Advance to the next slide	The seventh slide contains Word Art

8. Advance to the next slide	***The seventh slide contains an organization chart.***
9. Advance to the next slide	***The eight slide contains a bar chart.***
10. Press: <Page Up>	***To return to the previous slide.***
11. Press <Page Down>	***To return to the next slide. You can use the <Up Arrow> and <Down Arrow> keys to navigate through the slide show presentation.***
12. Observe that the current slide is slide number eight	***(The bar chart.) This is the last slide in the presentation.***
13. Click the left mouse button	***The slide show ends. A black screen containing the text "End of slide show, click to exit" may be displayed. If so, please proceed to step 14, else do not.***
14. Click the left mouse button	***To display the first slide in Normal view.***

4.0 CONCLUSION

PowerPoint is an application program used to create presentations.

5.0 SUMMARY

Here you learned how to start PowerPoint and open a presentation. Also you can now run a slide show.

6.0 TUTOR-MARKED ASSIGNMENT

Using Microsoft PowerPoint, create a presentation consisting of a minimum of four slides to be used in a subject that you teach. The following specifications need to be adhered to:

- Each slide must be appropriated not only to the subject matter portrayed but must be suitable for the age group to whom it will be presented.
- Assign a Design Template to the Presentation
- Include a Title slide and at least one bullet list
- At least one AutoShape and one clip art picture must appear in the presentation
- Use WordArt on at least one slide.

Save the presentation as **Presentation 1**. Run the slide show. Close the presentation.

7.0 REFERENCES/FURTHER READING

Ayo, S. K. (1988). *Computer Literacy, Operating System and Application* (2nd ed.) McKay Consult.

UNIT 2 POWERPOINT PRESENTATION SCREEN

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Orientation to the PowerPoint Presentation Screen
        3.1.1 The PowerPoint Window
        3.1.2 Moving between Slides
        3.1.3 Slide Views
    3.2 Closing a Presentation and Existing PowerPoint
        3.2.1 Closing a Presentation
        3.2.2 Exiting PowerPoint
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

In this unit, you will learn how to use the PowerPoint window.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- move between slides in a presentation
- change views
- close a presentation
- exit from a PowerPoint.

3.0 MAIN CONTENT

3.1 Orientation to the PowerPoint Presentation Screen

The PowerPoint window has many of the more common elements that you have been introduced to in both Excel as well as Word. We will focus on the elements that are unique to PowerPoint.

3.1.1 The PowerPoint Window

View buttons are located above the Drawing toolbar and on the left side of the window. Clicking on one of these buttons displays one of five views: Normal view, Outline view, Slide view, Slide Sorter view, and

Slide show. The PowerPoint window in Normal view is divided into three panes: the Slide pane, Outline pane, and Notes pane. These panes will change depending on which view you are using.

As you know by now, windows are made up of certain elements. The elements that make up a PowerPoint window are labelled in **Figure 2.1** that appears below. This figure shows PowerPoint displaying slide 1 of the presentation **"Preview Presentation.ppt"**. **TABLE 1**, analyses each individual component. You should be familiar with some of the elements.

Further Practice Exercise

1.	Use F*igure 2.1* below in conjunction with Table 1 to identify the different parts and functions of the PowerPoint windows.

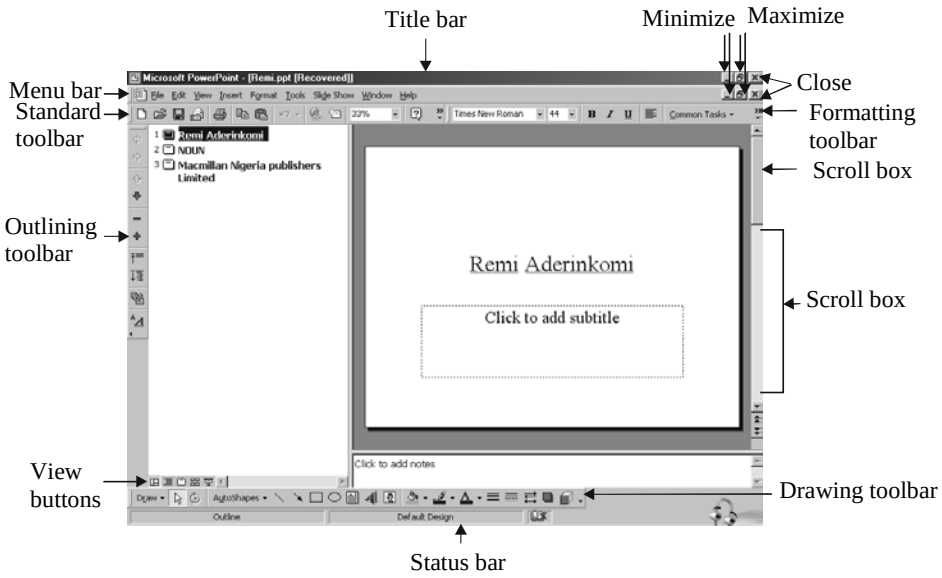


Figure 2.1: The PowerPoint window displaying Slide 1 of preview Presentation.ppt

Table 1: Elements of the PowerPoint window

Term	Definition
Title bar	Located across the top of the window, it displays the name of the application, and the name of the active presentation file.
Menu bar	Located below the title bar, it lists the PowerPoint menus.

Standard and Formatting Toolbars	Located below the menu bar, they provide quick access to some of the most frequently used commands in PowerPoint.
Drawing toolbar	Located just above the Status bar contains buttons which allow quick access to the commands most frequently used when drawing.
Outlining Toolbar	Located on the left of the screen. Used to access outlining features quickly. **Note:** Please do not be concerned if your screen does not currently display this toolbar. Later in this course you will learn how to switch toolbars on and off.
Scroll bar	Located along the right side of the window, it is used to view different slides in the active presentation.
Status bar	Located across the bottom of the window, it displays information about the active presentation, such as the current slide number and the name of the design template applied to the slide.
View buttons	Located above the status bar, they are used to switch views.

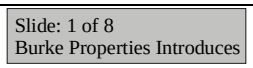
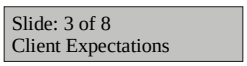
3.1.2 Moving between Slides

You use the vertical scroll bar to move among the slides in a presentation. Drag the scroll box up or down to move to a particular slide. As you drag, the slide-indicator box shows the slide number and slide title. Release the mouse button when the slide-indicator box displays the correct slide number. At the bottom of the scroll bar are the Previous Slide button and the Next Slide button. You can also click on these buttons to move through the presentation one slide at a time.

SELF ASSESSMENT EXERCISE 3

Moving between Slides in a Presentation

Before you begin: Ensure that **Preview Presentation.ppt** is open.

What you do	Comments/Prompts
1. Observe the status bar	Slide 1 of 8 (the current slide) is displayed.
2. Click once on the **Next Slide** button	 To move to the next slide.
3. Click once on the **Previous Slide** button	 To return to Slide 1.
4. Point to the scroll box on the scroll bar and press and hold the mouse button Drag the scroll box down until the slide-indicator box reads slide: 3 of 8 Release the mouse button	 To display the slide-indicator box.  To display slide 3.
5. Drag the scroll box up to return to Slide 1	

3.1.3 Slide Views

PowerPoint provides five working environments: Normal View, Outline view, Slide sorter view, Slide view, and Slide show. You can change views by using the **View** menu or by clicking on the appropriate View button.

- **In Normal view,** you are presented with the presentation outline, current slide, and current slide notes.
- **In Outline view,** you can create and organize information in a slide as well as in the entire presentation. You can work with slide titles and main text. In Outline view, the Outlining toolbar is displayed; it contains options that are different from those available in Slide view.
- **In Slide view;** you can work with only one slide at a time. You can add title and body text, graphs, organization charts, clip art, and WordArt. You can also draw shapes. You have access to all of the toolbars and the commands on the menu bar.
- **In Slide sorter view;** you can view thumbnails of all of the slides in your presentation. In addition, you can arrange the order of the slides.

- **In Slide show,** you can see your presentation displayed on the full screen of your computer monitor. Any transitions, builds, and timings are visible during the show.

SELF ASSESSMENT EXERCISE 2

Changing Views

Objective: To observe the various ways that you can view a presentation

Before you begin: Ensure that **Preview Presentation.ppt** is open and that Slide 1 is displayed.

What you do	Comments/Prompts
1. Click on the **Outline View** button	 To change to Outline view.
2. Observe the slide text Observe the Colour preview pane	Outline view provides you with an overview of all of the text in your presentation. In Outline view you can create, edit, and organize slides. A preview of the selected slide is displayed.
3. Observe the Outlining toolbar	The Outlining toolbar is located to the left of the Outline pane. **Note:** If the Outlining toolbar is not displayed, choose **View, Toolbars, Outlining**.
4. Click on the **Slide View** button	 Slide view enables you to work on one slide at a time.
5. Click on the **Slide Sorter View** button	 Slide Sorter view provides you with a thumbnail sketch of each slide in your presentation. You can use Slide Sorter view to rearrange slides.
6. Point to (Do not click on) the Slide Show button	 Clicking on this button is equivalent to choosing Slide Show, View Show.
7. Click on the **Normal View** button	

3.2 Closing a Presentation and Existing PowerPoint

The methods used for closing a file, or as it is known in PowerPoint, a presentation, and existing PowerPoint are similar to those applicable to both Word and Excel.

3.2.1 Closing a Presentation

Each file that you open remains open until you close it. Because having several files open reduces available memory, it is suggested that you close presentation files when you have finished working with them. To close a PowerPoint presentation, choose **File, Close**.

3.2.2 Exiting PowerPoint

To exit PowerPoint and return to the Windows environment, choose **File, Exit**. As a safeguard, if you have not saved changes in any open presentation, PowerPoint will prompt you to save those changes.

SELF ASSESSMENT EXERCISE 3

Closing a Presentation and Exiting from PowerPoint

Before you begin: Ensure that **Preview Presentation.ppt** is open.

What you do	Comments/Prompts
1. Choose **File, Close**	To close the presentation.
2. Observe the window	The PowerPoint application is still active, but no files are open.
3. Choose **File, Exit**	Remember that you may have to wait a few seconds for the full menu to be displayed in order to select the Exit option. The PowerPoint program is closed and the screen returns to the windows desktop.

4.0 CONCLUSION

Excel, Word and PowerPoint window have common elements but some elements are unique to PowerPoint.

5.0 SUMMARY

Here you learned how use PowerPoint window. In particular you learned five working environments of PowerPoint.

6.0 TUTOR-MARKED ASSIGNMENT

Create a different presentation following the guidelines in 1.6.
Save the presentation as **Presentation 2**. Run the slide show. Close the presentation.

7.0 REFERENCES/FURTHER READING

Ayo, S. K. (1988). *Computer Literacy, Operating System and Application* (2nd ed.) McKay Consult.

UNIT 3 CREATING NEW PRESENTATIONS

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1.0 INTRODUCTION

In this unit, you will learn how to choose a presentation and slide type. Furthermore you will be able to create a title slide and enter text on a slide.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- choose a presentation and slide type
- create a title slide
- add a bullet slide.

3.0 MAIN CONTENT

3.1 Creating a New Presentation

When you create a presentation in PowerPoint, you can choose from three tabbed categories in the New Presentation dialog box:

1. **General:** For a blank presentation
2. **Design Templates:** For templates that you can apply to a new PowerPoint presentation to define how it will look.
3. **Presentation:** For pre-designed PowerPoint presentations. Twenty-four pre-designed presentations are supplied with the PowerPoint program; each one contains placeholders for the title-object area and the text-object area.

3.1.1 Presentation Design Tips

Before beginning a new PowerPoint presentation, it is a good idea to review the basic guidelines for creating an effective presentation. The design tips listed in Table 2 below, are only recommendations; they may be modified depending on what type of information you are presenting.

Table 2

Design element	Design guideline
Text	A slide that is in portrait mode (vertical) should be limited to a maximum of: • 8 lines of text • 6 words per line. A slide that is in landscape mode (horizontal) should be limited to a maximum of: • 6 lines of text • 8 words per line
Font size	Titles: 44 points (or larger) Text: 32 points (or larger) Subtext: 28 points (or larger)
Font type	Limit to less than three font types per slide.
Background	For on-screen presentation, use dark, gradated backgrounds with contrasting text. For overhead transparencies, use clear, light backgrounds with contrasting text.
Templates	Use simple templates and limit the number of lines, textures, and other simple effects. Use clip art or graphics to enhance the template.
Text slides	Avoid using more than three in a row. Use tables or charts when appropriate.
Colour	In excess of 10% of the male population is colour blind. Take this into consideration when selecting, greens, reds and blues.
Case	Avoid typing in uppercase only.

SELF ASSESSMENT EXERCISE 1

Choosing a Presentation and Slide Type

What you do	Comments/Prompts
1. Start PowerPoint	
2. Choose: **Open an Existing Presentation** and click on **OK**	
3. Double click on **Preview**	Next you will close this file, but

Presentation.ppt	not exit PowerPoint
4. Select **File, Close**	
5. Select **File, New…**	To display the New Presentation dialog box.
6. Observe the New Presentation dialog box	You can choose from three tabbed categories: General, Design Templates, and Presentations.
7. If necessary, select the general tab	To display the selections in the General category
8. Select the **Design Templates** tab	To display the selection of design templates.
9. Select **Expedition**	
10. Observe the Preview box	(Located to the right of the design templates list.) It displays the template design and colour scheme.
11. Select the **Presentations** tab	To display a selection of pre-designed presentations.
12. Select the **Business Plan**	The template is displayed in the Preview box.
13. Select the **Design Templates** tab	
14. Select **Lock And Key**	
15. Click on OK	To display the New Slide dialog box.
16. In the New Slide dialog box, verify that the first slide is selected.	
17. Observe the lower-right corner of the dialog box	It displays the description "Title Slide."
18. Scroll through and select other descriptions.	Twenty-four AutoLayouts are available.
19. Select the **Title Slide** AutoLayout	
20. Click on **OK**	
21. Observe the slide	The left side of the slide contains a graphic object as well as two text placeholders

3.1.2 Entering Text on a Slide

To type text in a placeholder, select the placeholder by clicking on it, and then start typing.

SELF ASSESSMENT EXERCISE 2

Creating a Title Slide

What you do	Comments/Prompts
1. Click once on the title placeholder to select it.	A selection box appears around the title, placeholder, and an insertion points is displayed.
2. Type: **Burke Properties Introduces**	On the Outline pane, the text wraps onto two lines.
3. Click on the subtitle placeholder	To select it.
4. Type: **Our New Relocation Team**	
5. Click in a blank area of the slide	To deselect the subtitle placeholder.

3.1.3 Adding a New Slide


New Slide Button

To insert a new slide into a presentation,

1. Click on the **New Slide** button on the Standard toolbar.

2. The new slide dialog box will appear.

3. Select the AutoLayout of your choice.

3.1.4 Adding a Bullet Slide

The New Slide dialog box contains an AutoLayout for bullet lists. This layout is divided into two areas: the title placeholder and the bullet-list placeholder.

To add text to the bullet-list placeholder:

1. Click on the bullet-list placeholder. The first bullet is displayed.
2. Type the bullet text for the first bullet and press **<Enter>**. A second bullet is displayed.
3. Continue typing bullet items. Press **<Backspace>** to delete an unwanted bullet.
4. Click away from the bullet-list placeholder to deselect it.

SELF ASSESSMENT EXERCISE 3

Adding a Bullet Slide

What you do	Comments/Prompts
1. Click on the New Slide button	
2. Observe that the **Bulleted List** AutoLayout is selected	(The logical sequence following a title slide.)
3. Click on **OK**	
4. Observe the slide	The slide has a vertical graphic on the left and includes a title placeholder and bullet-list placeholder.
5. Add the title **Why A Relocation Team**	(Select the title placeholder, and then type the text)
6. Select the bullet-list placeholder	The selection box and the first bullet are displayed.
7. Type: **Market trend**	
8. Press: **<Enter>**	A new line and a second bullet are displayed.
9. Type: **Consumer demand**	
10. Press: **<Enter>**	
11. Type: **Competition**	
12. Press **<Enter>**	
13. Press: **<Backspace>**	To delete the new bullet.

4.0 CONCLUSION

PowerPoint has three tabbed categories in the New Presentation dialog box.

5.0 SUMMARY

Here you learned how to choose a presentation and a slide. You can now enter a text on a slide and add a bullet slide.

6.0 TUTOR-MARKED ASSIGNMENT

1. Create a different presentation following the guidelines in 1.6
2. Save the presentation as **Presentations 3.** Run the slide show. Close the presentation.

7.0 REFERENCES/FURTHER READING

Ayo, S. K. (1988). *Computer Literacy, Operating System and Application* (2nd ed.). McKay Consult.

UNIT 4 NAMING PRESENTATION, SAVING PRESENTATION AND FORMATTING SLIDES

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1.0 INTRODUCTION

In this unit, you will learn how to store a presentation for permanent usage.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- save a presentation
- name a presentation
- format slides
- work with drawing tools
- create objects.

3.0 MAIN CONTENT

3.1 Saving a Presentation

Before you save a presentation, it exists only in computer memory, a temporary storage area. For permanents storage, a presentation must be saved to some location, such as a hard drive or a floppy disk.

To save a presentation, you either the **File, Save As**… or the **File, Save** command.

3.1.1 The File, Save as Command

The **File**, **Save As**… command enables you to:

- save a presentation for the first time;
- save a presentation with a new filename;
- save a presentation in a different location (on another disk or in a different folder).

To save a presentation with a new name or in a new destination:

1. Choose **File, Save As**… to display the **Save As** dialog box.
2. In the **Save In** list box, select the appropriate location (disk, drive or folder).
3. In the **File Name** text box, type the name of the file.
4. Click on the **Save** button in the lower right corner of the dialog box.

After the presentation has been saved, its filename will be displayed in the title bar while it is open.

When you save a file, PowerPoint adds the filename extension.PPT to identify the file as a PowerPoint file. You should avoid adding filename extensions yourself.

3.1.2 The File, Save Command

The **File**, **Save** command enables you to:

- re-save a presentation that has been saved previously.

When updating the saved version of a presentation using this command, no dialog boxes are displayed. You cannot rename the file or save it in a different location.
To update the saved version of a presentation:

1. Choose **File, Save** or click on the **Save** button on the Standard toolbar.

3.2 Naming a Presentation

When you save a file for the first time, PowerPoint automatically assigns a filename by using the Title line of the first slide in the

presentation. You can accept this default name or name it something different.

A filename should be descriptive so that you can remember the file's contents. A filename in PowerPoint can contain up to **255** characters, spaces, and other punctuations. A file cannot contain any of the following characters: ^ : ; * ? < > |.

SELF ASSESSMENT EXERCISE 1

Saving the Presentation

What you do	**Comments/Prompts**
1. Choose: **File, Save As…**	To display the Save As dialog box.
2. The default folder is listed in the Save in list box	By default, PowerPoint uses the folder **My Documents.** This may have been reset on your computer. For the purposes of this course, you will be saving all documents to the A: drive.
3. Expand the **Save In** list box by clicking on the down arrow	Even if the default has already been set to the **A:** drive, please complete this step so that you can practice how to do so if necessary.
4. Click on 31/2 Floppy (A)	This setting is reflected in the **Save In** list box. Next you will assign a file name.
5. If necessary, select the text in the **File Name** text box (Hint: Position the mouse pointer to the left of the file name. Press and hold down the mouse button and drag it over the text.)	The text **Interoffice Memo** is highlighted.
6. Type: **My Presentation**	To name the presentation, My Presentation
7. Click on the **Save** button in the lower Right corner of the dialog box	To save the file.
8. Observe the title in the title bar	My Presentation is displayed.

3.3 Formatting Slides

"Formatting" refers to the appearance or text, not the text itself. You can change the appearance of text by changing its attributes, indentation and

line spacing. In order to change the appearance of existing text, the text has to be selected. Various selecting techniques are available in PowerPoint. The most common way of selecting text is to "click and drag" the mouse over the relevant text.

3.3.1 Attributes

Text attributes include the following:

- Font
- Size
- Style
- Colour

You can use the text-formatting buttons to apply certain text attributes, such as font, font size, bold, italics, underline, shadow, and colour, quickly. The text-editing buttons work like toggle switches: click once to turn an option on, and click again to turn the option off.

3.3.2 The Edit, Undo Command

You can use the **Edit, Undo** command or the **Undo** button to reverse changes that you make in your presentation. For example, if you accidentally delete text, you can restore the text by using the **Undo** command.

The speed key combination of **<Ctrl> + Z** may be used in the place of the menu commands.

SELF ASSESSMENT EXERCISE 3

Formatting Text

What you do	**Comments/Prompts**
1. On Slide 2, click on the title	The title place holder will be selected and the I-beam will be flashing.
2. Double-click on the word **Relocation**	To select just the word.
3. Click on the **Bold** button	 To bold the text.
4. Click on the **Italic** button	
5. Double-click on the word **Market**	
6. **Bold** the text	(Click on the Bold button)
7. Press: **<Ctrl> + Z**	The Bold attribute is removed

	(undone). The word "Market" is still selected.
8. Bold the text	(Click on the Bold button)
9. Select: Consumer	(Double-click to select the word)
10. Bold the text	
11. Select: Competition	
12. Bold the text	
13. Save and close the presentation	

3.4 Working with Drawing Tools

PowerPoint enables you to create drawn objects using a set of tools located on the Drawing toolbar. The drawing tools include buttons that enable you to automatically draw circles, rectangles, lines, and other geometric shapes. Drawn objects can be edited like PowerPoint objects. It is possible to duplicate, resize, move, colour, cut, and paste drawn objects. You can also add attributes such as borders, fills, and shadows, to drawn objects. In addition to this, drawn objects can be aligned and rotated. Text may be added to drawn objects.

3.4.1 The Drawing Toolbar

The Drawing toolbar is one of the default toolbars displayed when you start PowerPoint. It contains various tools to draw boxes, lines, and circles, as well as tools to alter those objects.

Two of the buttons that are found on the Drawing toolbar are **Draw** and **AutoShapes**. If you click on the **Draw** button, a pop-up menu is displayed. The commands on this menu enable you to group and ungroup, rotate and flip, and move objects in front of or behind each other, to name but a few. The AutoShapes button is firstly used to select from over 150 shapes and secondly to draw that shape on the PowerPoint slide.
You can move any toolbar by pointing between buttons and dragging or by dragging its title bar.

SELF ASSESSMENT EXERCISE 3

The Drawing Toolbar

What you do	**Comments/Prompts**
1. Open: **Drawing Presentation** and move to Slide 3	
2. Add a new slide	(Click on the New Slide button.)

3. In the New Slide dialog box, double-click on the **Blank** AutoLayout	The Slide is blank, but it still contains the background including the vertical graphic. (Key on the left)

3.5 Creating an Object

To create an object using the drawing toolbar, the following steps apply:

1. From the *Drawing* toolbar, click on the drawing tool that you want to use.
2. Move the mouse pointer to where you want to begin drawing the object. The mouse pointer changes to a crosshair.
3. Drag the crosshair until the object is the desired shape and size.
4. Release the mouse button. The object is completed and is automatically selected.

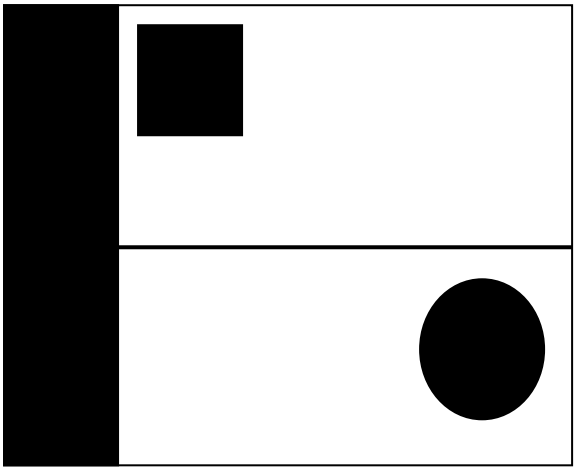

Figure 4.1: Drawn objects

SELF ASSESSMENT EXERCISE 4

Creating Objects

What you do	**Comments/Prompts**
1. From the Drawing toolbar, select the **Rectangle** tool	
2. Place the mouse pointer in the upper-left portion of the blank slide	The mouse pointer changes to a crosshair. You will use the crosshair to draw a rectangle.

3. Using Figure 4.1 as a guide, drag diagonally to create a rectangle displayed. Release the mouse button	As you drag, an outline of the rectangle is shown. The rectangle is completed and filled.
4. Select the **Line** tool	 Selecting a tool deselects the object. Clicking anywhere outside of the object also deselects the object.
5. Please the crosshair below the rectangle	The mouse pointer changes to a crosshair whenever a drawing tool is selected.
6. Press: <**Shift**>	To constrain the angle as you draw.
7. Drag across the slide to draw a horizontal line	
8. Release the mouse button	
9. Release <**Shift**>	The rectangle is deselected and the new drawn object is selected. The line is complete.
10. Select the **Oval** tool. Place the mouse pointer on the bottom right the slide below the line	
11. While pressing <**Shift**>, drag diagonally to draw a circle. Release the mouse button, and then release <**Shift**>	The circle is completed and filled.

4.0 CONCLUSION

For permanent storage, a presentation must be saved to some location, such as hard drive or a floppy disk.

5.0 SUMMARY

You learned here how to save a presentation and also name a presentation using PowerPoint.

6.0 TUTOR-MARKED ASSIGNMENT

Create a different presentation following the guidelines in 1.6.
Save the presentation as **Presentation 4**. Run the slide show. Close the presentation.

7.0 REFERENCES/FURTHER READING

Ayo, S. K. (1988). *Computer Literacy, Operating System and Application* (2nd ed.). McKay Consult.

UNIT 5 USING AUTOSHAPES

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1.0 INTRODUCTION

You will learn in this unit that AutoShapes button provides access to over 150 shapes. You will learn how to use AutoShapes button in this unit.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- use AutoShapes
- select a clip art Autolayout
- select a WordArt “Style Type” and add text.

3.0 MAIN CONTENT

3.1 Using AutoShapes

The **AutoShapes** button provides access to over 150 shapes. When you click on the **AutoShapes** button, a pop-up menu is displayed with nine choices. If you choose a submenu choice and a shape, the mouse pointer shape changes into a crosshair, enabling you to draw that particular shape.

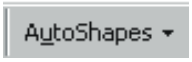
To draw an AutoShape

1. Click on the **AutoShape** button.
2. Choose a submenu choice and a shape.

3. Press and hold the mouse button and drag the crosshair to create the **AutoShape**.
4. Release the mouse button.

SELF ASSESSMENT EXERCISE 1

Using Autoshapes

What you do	Comments/Prompts
1. Click on the **AutoShapes** button	 To display the AutoShapes pop-up menu. The mouse pointer changes to a crosshair.
2. Choose: **Stars And Banners**	(Located on the extended menu.)
3. Select: **16-Point Star**	
4. Position the mouse pointer to the left of the circle below the centre line.	
5. Draw a 16-point star	The 16-point star contains a solid fill colour.
6. Save the file as **My Drawing Presentation**	

3.2 Using Clip Art

Graphic images called *clip art* are supplied with PowerPoint. These images are stored in the Clip Art folder, which is shared with other Microsoft Office applications.

3.2.1 Adding a Clip Art Graphic to a Slide

To add a clip graphic to a slide:

1. On the Drawing toolbar, click on the **Insert Clip Art** button 
2. Select a category from the **Categories** list box.
3. Click on the clip art image that you want to add.
4. Click on the Insert Clip button, located on the “pop-up” menu.
5. Close the **Insert Clip Art** dialog box.

The fastest way to do many tasks in **Clip Gallery** is to use the Pop-up menu, which appears when you click on any clip. Figure 5.1 depicts an illustration of the pop-up menu.

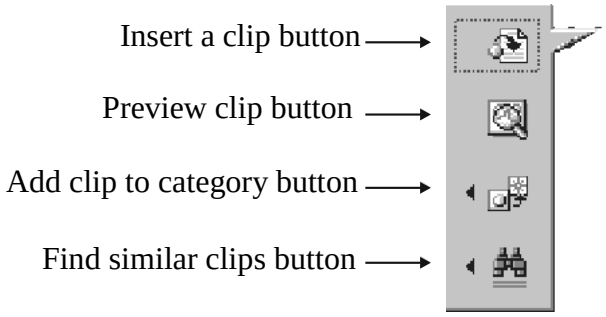
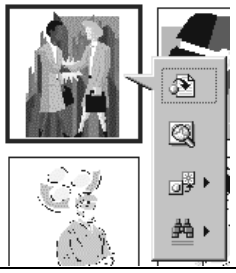


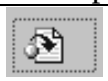
Figure 5.1: The Clip Art Pop-Up Menu

SELF ASSESSMENT EXERCISE 2

Selecting a Clip Art AutoLayout: Viewing and Inserting a Clip art Picture

Before you begin: Ensure that PowerPoint is open and that **My Drawing Presentation** is open.

What you do	**Comments/Prompts**
1. Move to Slide 4	
2. Add a new slide	
3. Double-click on the **Clip Art & Text** AutoLayout	
4. Add the title **Relocation Team**	
5. Double-click on the **"Double click to add clip art"** placeholder	To display the Microsoft Clip Gallery dialog box.
6. If necessary, select the Pictures tab	To view the available clip art categories.
7. In the **Search For Clips** text box, select the existing text and type: **work**	To search for clip art relating to work.
8. Press: **<Enter>**	To display work-related clip art.
9. Scroll through the clip art and locate the image of two people shaking hands	
10. Click on the picture	

	To display the pop-up menu
11. Click on the **Insert Clip** button	 To insert the selected picture into the slide, the picture toolbar is displayed.
12. Save the presentation	

3.3 Using WordArt

The *WordArt* toolbar lets you add special effects to the text in your presentations. For example, you can have your text on shapes, such as circular, slanted and curved. Text can also be sized, stretched, and rotated. The spacing between characters can be adjusted, and formatting options (such as font size, bold, and italics) and shading can be applied.

3.3.1 Selecting a Style and Adding Text

To add text by using the WordArt toolbar:

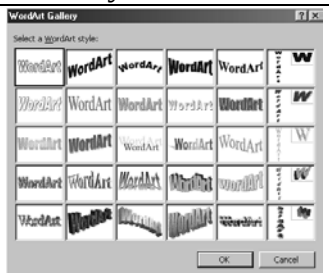
1. Click on the **Insert WordArt** button on the Drawing toolbar to display the WordArt Gallery dialog box.
2. Select a **WordArt** style and click on **OK**.
3. In the **Edit WordArt Text** dialog box, type the text you want to format.
4. Click on **OK** to view the text and display the *WordArt* toolbar.
5. Select text-effect options from the *WordArt* toolbar.
6. Deselect the placeholder.

SELF ASSESSMENT EXERCISE 3

Selecting a WordArt "Style Type" and Adding Text

Before you begin: Ensure that **My Drawing Presentation** is open and that Slide 5 is currently displayed on the screen.

What you do	**Comments/Prompts**
1. Add a new slide	
2. Select the **Title Only** AutoLayout	
3. Add the title **Our New Logo**	It is not necessary to deselect the Title object area before continuing with the next step.

4. Click on the Insert WordArt button	 To display the WordArt Gallery dialog box.
5. Observe the WordArt Gallery dialog box	You can select one of the 30 WordArt styles.
6. Select the WordArt style of your choice	
7. Click on OK	To accept the WordArt style and display the Edit WordArt Text dialog box.
8. Type: **Relocation Team**	The text is displayed in the Edit WordArt Text dialog box.
9. Click on **OK**	To display the text inside the slide placeholder. The WordArt toolbar is displayed.
10. Deselect the WordArt placeholder	To view the slide. The WordArt toolbar is no longer visible. longer visible.
11. Observe the slide	The WordArt text is centred on the slide, but is not very large. not very large.
12. Click on Relocation Team	To select the object. The WordArt toolbar is displayed.

3.3.2 The WordArt Toolbar

The WordArt toolbar enables you to create and edit text effects by using the available options. Tools on the Drawing toolbar may also be used to change the effect. Figure 5.2 below, is a picture of the WordArt toolbar. The buttons used in this section have been labelled.

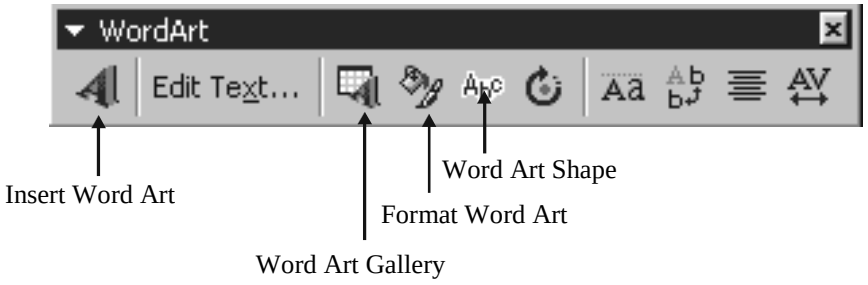
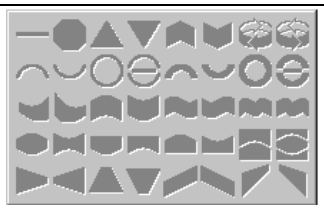


Figure 5.2: The WordArt Toolbar

What you do	Comments/Prompts
1. Verify that the WordArt text is selected	
2. Use the corner resize handles to enlarge the object proportionally	(Place the mouse pointer over a corner resize handle and drag away from the object to enlarge it.)
3. On the Word Art toolbar, click on the WordArt Gallery button	 To display the *WordArt* Gallery dialog box.
4. Select the style of your choice	
5. Click on **OK**	To apply a new Word Art style
6. If necessary, move the object to the centre of the slide	
7. On the Word Art toolbar, click on the Word Art Shape button	 To display a palette of shapes.
8. Select a shape	 To apply the new Word Art shape.

SELF ASSESSMENT EXERCISE 3

Running your Slide Show

What you do	Comments/Prompts
1. Select Slide 1	
2. Press: **<F5>**	When you have finished running the slide show, close the presentation.
3. Click on the left mouse button to move to the next slide	
4. Repeat step 3 above until the slide show comes to an end	
5. Exit PowerPoint	

4.0 CONCLUSION

Graphic images, called clip art, which are supplied with PowerPoint are stored in the Clip Art folder.

5.0 SUMMARY

You can now use AutoShapes and run slide shows.

6.0 TUTOR-MARKED ASSIGNMENT

1. Create a different presentation following the guidelines in 1.6.

2. Save the presentation as **Presentation 5**. Run the slide show. Close the presentation.

7.0 REFERENCES/FURTHER READING

Ayo, S. K. (1988). *Computer Literacy, Operating System and Application* (2nd ed.). McKay Consult.

MODULE 6

Unit 1	Networking, Internet and E-mail
Unit 2	Internet
Unit 3	Further Practical Work on the Internet
Unit 4	Electronic Mail
Unit 5	Reading and Responding to an E-Mail Message

UNIT 1 NETWORKING, INTERNET AND E-MAIL

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1.0 INTRODUCTION

An interconnected set of two or more computers with data communication devices may be called a computer network. The wired arrangement consists of a communication software (Network Operating System), computer systems (Nodes), Network interface cards (connectors) and network cable (medium).

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- state the principles of Networking
- explain Local Area Network

- explain Wide Area Network
- explain what internet is
- explain what is World Wide Web.

The objective of this section of Module 6 is to give you a brief overview of the principles of Networking.

3.0 MAIN CONTENT

3.1 Terminology

You will hear talk of LAN, MAN, WAN and WWW. This is often confusing, but let's attempt to define the terms:

LAN Stands for Local Area Network and refers to a network set up in one building.

MAN is a Metropolitan Area Network and refers to two LANs linked between two buildings in the same metropolis.

WAN is a Wide Area Network and refers to LANs or MANs that are connected between cities.

WWW is a World Wide Web and refers to the linking up the world's LANs, MANs and WANs to form a web of networks that cover the earth.

3.1.1 Networks

When two or more computers are interconnected this is generally referred to as a network. Networks have become increasingly popular over the last decade. There are a various reasons for this phenomenon. The two main reasons are firstly convenience, and secondly cost savings.

Networks can be used to transfer information between computers, even if they use different operating systems. A network can also be used to send data to remote storage devices and printers, without having to send all of the signals through an expensive mainframe computer. Generally networks provide an inexpensive way to interconnect any number of systems and make communication and sharing of data quick and easy.

There are two main categories of networks used in the industry, which are LAN's (Local Area Network) and WAN's (Wide Area Network).

3.2 Local Area Network (LAN's)

A LAN is a network in which all signals run on a single set of cables, which is fully administered by the owner. There are three typical network topologies (layouts). These are star, ring and bus shapes.

The star shape is the most common. Here outlying stations communicate through a central hub device.

In a ring network, messages circulate the loop, passing from station to station like an old fashioned bucket brigade of fire fighters.

Stations on a bus network send data to a transmitter at one end of the bus. This transmitter rebroadcasts the information back along the bus so that other stations can receive it.

Star network **Token-ring network**

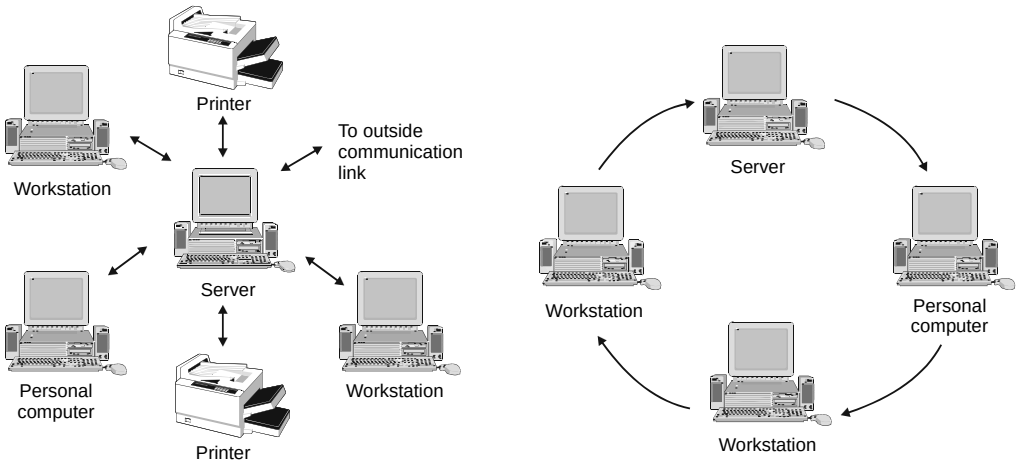


Figure 1.1 Source: Microsoft Encarta 98 Encyclopedia Deluxe Edition.

3.2.1 Network Components

Besides the cables linking the computers there are three components that are present in most networks. These are:

The File server This is usually a high performance computer with a very large hard disk. The file server is a mass storage device that all users can share. It is used to store all shared programs and data on the network.

Workstations These are the computers on a network that users work on. Each computer has a network card installed in it, which allows the machine to receive and transmit messages on the network cable.

Shared equipment All users attached to a network can also make use of certain shared equipment.

It doesn't just end with a single LAN of course. Some companies prefer to keep separate workgroups (departments), which is accomplished by giving each workgroup their own LAN.

3.3 Wide Area Networks (WAN's)

LANs or MANs that are connected between cities are known as WAN's. Why do we need WAN's?

A LAN only has a range of approximately one-kilometre. Even if it could reach further, the cost of laying several hundred kilometres of coaxial cable from one city to another is prohibitively expensive. A better way to link remote computers together is to use a cable network that is already in place and has been carrying long distance messages for years – the telephone system.

To use the telephone system you first need to convert your electronic signal into something more suitable for the phone lines. Telephone transmits sounds, not the radio frequency signals that pulse around a LAN. To do the conversion a device called a Modem is used. The name is a contraction of Modulator-Demodulator. All that means is that the device takes a series of electronic signals and converts them into pulses of sound, which can be sent along the telephone lines.

A prime example of WAN is the Internet. The Internet could be regarded as the largest of all WAN's. It's a global network of LAN's all connected together using the international telephone system. So you can now send messages and data to people in Finland, China or any other country that you can phone.

3.4 Overview of the Internet and the World Wide Web

3.4.1 What is the Internet?

The Internet is a global network of computers that are able to communicate with one another, using a common language called HTML (Hypertext Mark-up Language). These computers are connected

worldwide and can be accessed from anywhere in the world. All you need is a modem and the software to be able to get onto the internet.

The internet is similar to the international telephone system – no one owns or controls the whole system, but it is connected in a way that makes it function as a single big network.

3.4.2 What is the World Wide Web?

Millions of people have Internet access today. The World Wide Web (the web or www) gives you a graphical, easy-to-navigate interface for looking at documents on the Internet. These documents, as well as the links between them, comprise a "web" of information.

The web lets you jump or "hyperlink" from one web page to other pages on the web. You can think of the web as a big library. Web sites are like the books, and web "pages" are like specific pages in the books. Pages can contain news, images, movies, sounds, and 3D worlds – just about anything.

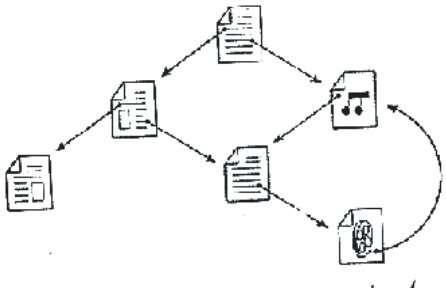


Figure 1.2: Hyperlinks

These pages can be located on computers anywhere in the world. When you are connected to the web, you have equal access to information worldwide; there are no additional long-distance charges or restrictions.

Over the last few years, the web has grown to include a vast array of information – everything from stock quotes to job opportunities, bulletin boards to news, previews of movies, literary reviews, and games.

People often talk about "surfing" the web and visiting new sites. "Surfing" means following hyperlinks to pages and subjects you may never have heard about, meeting new people, visiting new places, and learning about things from all over the world.

Remember that the Internet is not just about corporate information. Because it is very easy to publish on the web, many individuals have set up personal "home pages," pages about themselves and their interests,

pictures of themselves and more. Some even have pointers to what they are wearing in the office that day, or their pet.

As mentioned earlier you can think of the World Wide Web as a big library on the Internet. Web "sites" are like the books in the library and web "pages" are like specific pages in the books. A collection of web pages is known as a web site. You start your journey through the web from a particular web site.

3.5 Browser

A "browser" is a software tool that you use to look at web pages. As you learned, pages on the web are interconnected. You connect to other pages by clicking text or graphics that are called hyperlinks.

3.6 Hyperlinks

Hyperlinks are underlined or bordered words and graphics that have web addresses (also know as URL – Universal Resource Locator) embedded in them. By clicking a hyperlink, you jump to a particular page in a particular web site. You can easily identify a hyperlink. Hyperlink text is a different colour from the rest of the text in a web site.

Surfing the web means following hyperlinks to different web pages. As you surf around the web, you may find pages you have read about or seen mentioned on television. Have fun surfing the web to learn about subjects you are interested in and visiting new sites all over the world.

3.7 Home Pages

A "home page" is the starting point for a web site. It is something like the cover page or the Table of Contents of a book.

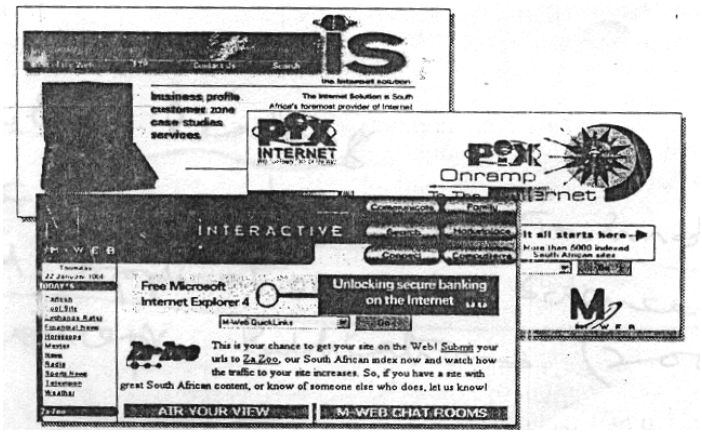


Figure 1.3: Examples of Home Pages

4.0 CONCLUSION

Computer Network can be categorised into two: wired network and wireless network. The wireless network makes use of radio waves to transmit data or information from one node to another.

5.0 SUMMARY

Here you learned important terms like LAN, MAN and WWW. You will learn more about them in this module.

6.0 TUTOR-MARKED ASSIGNMENT

Briefly discuss the benefits of LAN and WAN.

7.0 REFERENCES/FURTHER READING

Ayo, C. K. (2001). *Information Technology: Trends and Applications in Science and Business*. Concept Publications.

UNIT 2 INTERNET

CONTENTS

1.0 Introduction
2.0 Objective
3.0 Main Content
    3.1 Internet Addresses
    3.2 Internet Service Providers (ISP)
    3.3 Internet Terminology
    3.4 Exercise 1: Examining the Start Page of Academy of Learning
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

There are local, national and international networks and most major networks are interconnected. The Internet is a global network of interconnected computer networks.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- work on the internet.

3.0 MAIN CONTENT

3.1 Internet Addresses

All home pages have what is called an Internet Address. It looks like this: http://www.ananzi.com. You can go to this page directly if you use this address in the address box.

The address box shows the address, or technically speaking, the URL of the page that you are currently viewing in your browser. URL stands for Universal Resource Locator, which is simply another word for address.

In our example home page, the address used is:

Figure 2.1 URL Address

3.2 Internet Service Providers (ISP)

These are the people who control the access to the web. A person has to sign on with an ISP before you can get onto the Internet. Normally a monthly fee is payable but there are also contracts which reduce the monthly costs.

There are many ISP available to you, you need to investigate them and decide with which one you wish to subscribe. Once you have subscribed they help you set up your Internet. They give you a POP address from which you can receive e-mail and get connected to the web. Once you are set up you can then get onto the Internet.

3.3 Internet Terminology

When working with the Internet, certain terms and terminologies are used to describe processes and concepts. A vast list of such terminology is available. Table 1 below describes a few of the more commonly used of these terms and terminologies.

Table 1

Terminology	**Definition**
Access Privileges	The privilege to access and make changes to folders.
Address	The unique code assigned to the location of a file in storage, a device in a system or network, or any other data source on a network.
Attachments	Multimedia files that are 'attached' to an E-mail; can be text, graphics, sound, video, spreadsheet, database or even an entire application.
Baud	The number of signalling elements that can be transmitted per second on a circuit. Older term being replaced by bps-bits per second
Bit	The smallest amount of information that can be transmitted. A combination of bits can indicate an alphabetic character, a numeric digit, or perform signalling, switching or other functions.
Browser	Application software that gives you a graphical interactive interface for searching, finding,

	viewing and managing information over a network.
BBS (Bulleting board system)	An electronic bulleting board where users can leave messages. Many BBS's are on a membership basis.

Terminology	**Definition**
Chat	"Chat" is a term used to describe real-time conferencing. For example, IRC, "WebChat", prodigy and aol chat rooms are all examples of "chat".
Client	A computer that uses the services of another computer (a server or host). If you have a PC on your desk and you retrieve information from the World Wide Web, your PC is a client of the Web server to which it is connected.
Cybercafe	A café or bar allowing customers to explore the World Wide Web whilst having a drink or snack, usually charged per half-hour of usage.
Cyberspace	Originally used in "Neuromancer," William Gibson's novel of direct brain-computer networking referring to the collective realms of computer-aided communication.
Database	A multi-user collection of information. Often supports random access selectivity and multiple "views" or levels of abstraction of the underlying data.
Dedicated Line	A private line leased from a telecommunications carrier.
Download	To transfer programs or data from a computer to a connected device, usually from a server to a personal computer.
e-mail (Electronic Mail)	Messages sent on the Internet to a particular individual.
File Server	A computer that provides access to files for remote users (clients).
Firewall	A firewall sits at the gateway of a private network and only lets certain types of information in from and out to the network.
Freeware	Software allowed to be distributed free by the author, but often with certain conditions applying (i.e. the software cannot be modified etc).

Home Page	On the World Wide Web, this is the main navigation page owned by a company, organisation, university, individual etc, from which hyperlinks are made to other pages on the site (or other sites).

Terminology	**Definition**
HTML (Hyper Text Markup Language)	A "tag" language in which web pages are formatted and web information is distributed.
HTTP (Hypertext Transfer Protocol)	The method by which documents are transferred from the host computer or server to browsers and individual users.
Hyperlink	In World Wide Web pages, hyperlinks are highlighted text or images which, when selected (usually by clicking the mouse button), follow a link to another page. Hyperlinks can also be used to automatically download other files as well as sounds and video clips.
MoDem (MODulator-DEModulator)	End of user computer interface that enables digital data to be transmitted over analog transmission facilities like phone lines.
Multimedia	Computer systems that integrate audio, video and data.
Network	A system of inter-related elements that are interconnected in a dedicated or switched linkage to provide local or remote communication (of voice, video, data, etc.) and to facilitate the exchange of information between users with common interests.
Newsgroup	A distributed bulletin board system about a particular topic. Usenet news is a system that distributes thousands of newsgroups to all parts of the Internet.
Page	A hypermedia document on the web.
PKZIP	PKZIP is a shareware compression utility for PCs. A program called PKUNZIP is used to decompress.
"POP" (point of presence)	A "pop" is an Internet service provider's dial-up connection for modem users, used particularly to describe local connections so modem users don't have to dial long distance. For example, a particular ISP

	might be based in Johannesburg, but have "POP's" in Cape Town and Durban.
Server	In a network, a host data station that provides facilities to other stations.
Site	Address location of a server on the Internet.

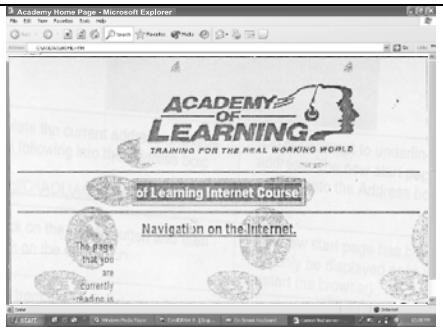
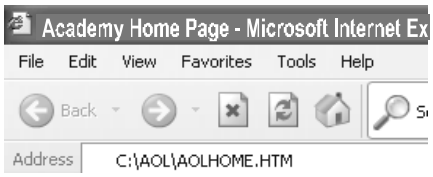
Terminology	**Definition**
UNZIP	To unzip a file means to decompress, or expand a file that has been made smaller using a compression utility.
URL (Uniform Resource Locator)	The form of the site address that reveals the name of the server where the site's files are stored, the file's directory path, and its file name.
WWW (World Wide Web)	Internet system for world-wide hypertext linking of multimedia documents, making the relationship of information that is common between documents easily accessible and completely independent of physical location.
ZIP	When one "compresses" (i.e. makes a smaller but equal copy) a file using "pkzip", the resulting file is called a "zip" file. It usually ends with the file extension "zip".

3.4 Exercise 1: Examining the Start Page of Academy of Learning

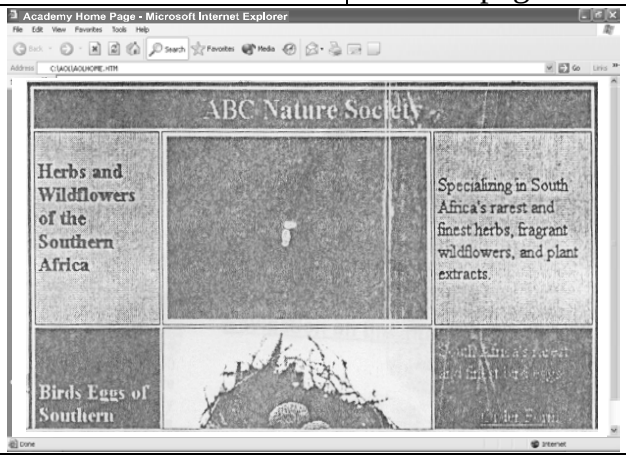
Objective: To open the Explorer, examine and change the start page

Before you begin: Ensure that you have the Windows desktop displayed on your screen.

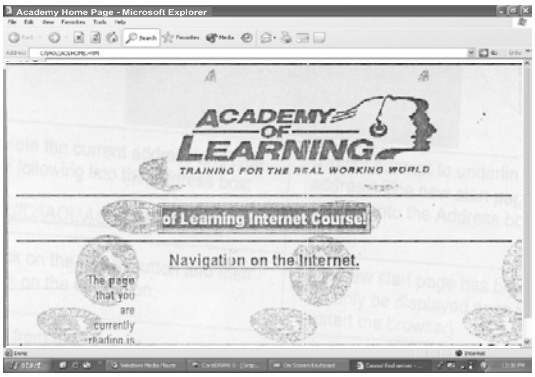
What you do	**Comments/Prompts**
1. Locate and double-click on your browser icon, which is found on the desktop  Internet Explorer	The Internet Explorer is launched and the start page is displayed as shown below.

	
2. You will now examine the **URL Address** of the current page The address should be: **C:\AOL\AOLHOME.HTM**	 You will now change the current start page.
3. Click on the **Tools, Internet Options** commands	The Internet Options dialog box is opened.
4. Ensure that the **General** panel is selected	Note the Address of the Home Page: ://C:/AOL/AOLHOME.HTM 
5. Delete the current address and type the following into the Address box: File://C:/AOL/AOLHOME.HTM	(Do not attempt to underline the address) The new start page is entered into the Address box.
6. Click on the **Apply** button and then click on the **OK** button	The new start page has been set. (It will only be displayed once you restart the browser).
7. Exit from the browser	You are returned to the Windows desktop.
8. Launch the browser	The new start page will be displayed on your screen. (Maximize if necessary). Your screen should now appear

	similar to the example shown on the next page.



9. Click on the **Tools, Internet Options** command.	The Internet Options dialog is opened
10. panel is selected	Note the Address of the Home page: file:///C:/AOL/AOLHOME1.HTM Next you will change the start page back to the original home page.
11. Delete the current address and type the following into the Address box: **file://C:\AOLHOME.HTM**	The new start page is entered into the Address box
12. Click on the **Apply** button and	The new start page has been set.
13. Exit from the browser	You are returned to the Windows desktop.
14. Launch the browser	The new start page will be displayed on your screen. Your screen should now appear similar to the example shown on the next page.
15. Exit from the browser	You are returned to the Windows desktop.



4.0 CONCLUSION

The Internet is used for

- Information browsing
- electronic mail (e-mail)
- Newsgroups
- File transfer
- Access to and use of other computers.

5.0 SUMMARY

The advantages and terminology of global network (Internet) were outlined.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss briefly what benefits Internet offers the Nigerian society.

7.0 REFERENCES/FURTHER READING

French, C. S. (2000). *Computer Science* (5th ed.). Gosport, Hants: Ashford Colour Press.

UNIT 3 FURTHER PRACTICAL WORK ON THE INTERNET

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    3.2 Exercise 3: Links
    3.3 Exercise 4: Using the Address Box
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1.0 INTRODUCTION

In this unit you open the Explorer and navigate around the start page. You will also use some of the links that are located in the start page before you conclude the unit you will navigate using the address box.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

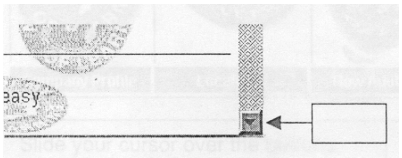
- open the Explorer and navigate around the start page
- use some of the links located in the start page
- navigate using the address box.

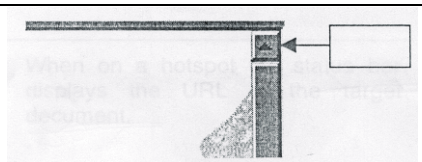
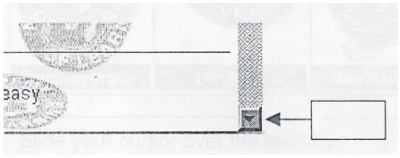
3.0 MAIN CONTENT

3.1 Exercise 2: Navigating the Start Page

Objective: To open the Explorer and navigate around the start page

Before you begin: Ensure that you have the Windows desktop displayed on your screen.

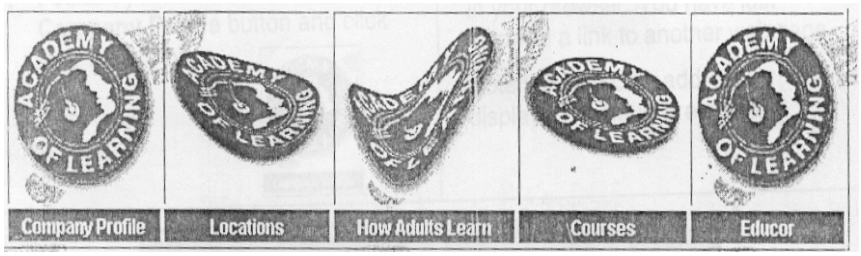
What you do	Comments/Prompts
1. Locate and double-click on your browser icon, which is found on the desktop 	
2. Press the down arrow key on your keyboard Using the up arrow scroll to the top of the document.	The down arrow key scrolls you down the current documents, one line at a time. You can use the up and down arrow keys to scroll the current page within your browser window.
3. Press the **<Page Down>** key on your keyboard.	The current document moves down one screen (page) at a time. The <Page Up> key moves you up one screen at a time.
4. Press the **<Page Up>** key on your keyboard.	The current document moves up to the top or start of the current page.
5. Press the **<Ctrl>** + **<End>** keys on your keyboard.	The current document moves down to the bottom or end of the current page.
6. Press the **<Ctrl>** + **<Home>** keys on your keyboard.	The current document moves up to the top or start the current page. Now you will use your mouse to navigate in the current page.
7. Click on the scroll bar down arrow at the bottom of the vertical scroll bar. 	The current document moves down towards the bottom or end of the current page.
8. Click on the scroll bar up arrow at the top of the vertical scroll bar.	The current document moves up towards the top or start of the current page.

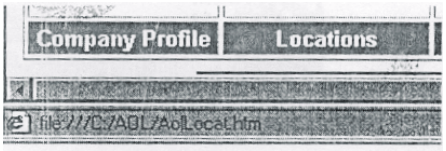
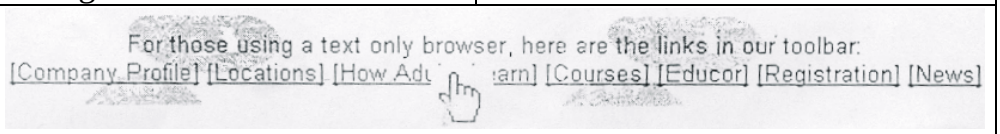
	
9. Click on the grey area of the scroll bar. (Between the scroll bar down arrow and the grey scroll box) 	The current document moves down one screen (page) at a time. Repeat the process to move back to the top of the current page. (Click between the scroll bar up arrow and the grey scroll box).
10. Exit your browser.	You are returned to the desktop.

3.2 Exercise 3: Links

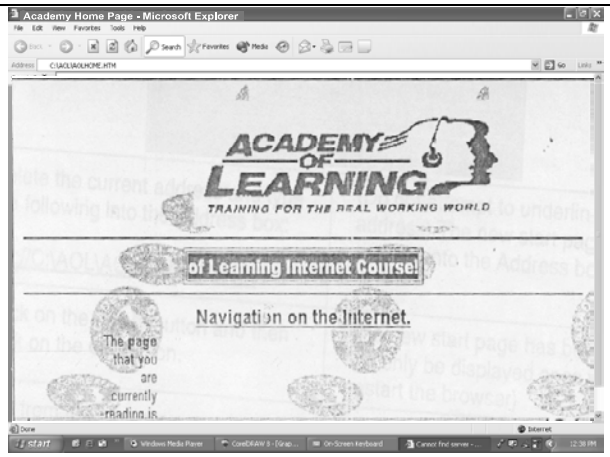
Objective: To open the Explorer and use some of the links located in the Start Page.

Before you begin: Ensure that you have the Windows desktop displayed on your screen.

What you do	Comments/Prompts
1. Locate and double-click on your browser icon, which is found on the desktop.  	The Internet Explorer is launched and the
2. Scroll down the Start Page until the following buttons are visible.  	The following buttons on the Start Page are displayed.
3. Slide your cursor over the buttons.	As your cursor passes over a hotspot the cursor changes shape:

	
4. When on a hotspot the status bar displays the URL of the target document.	The URL (similar to the following example) is displayed in the status bar: 
5. Scroll to the bottom of the Start Page.	The following text links are visible:
	

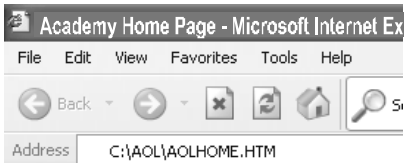
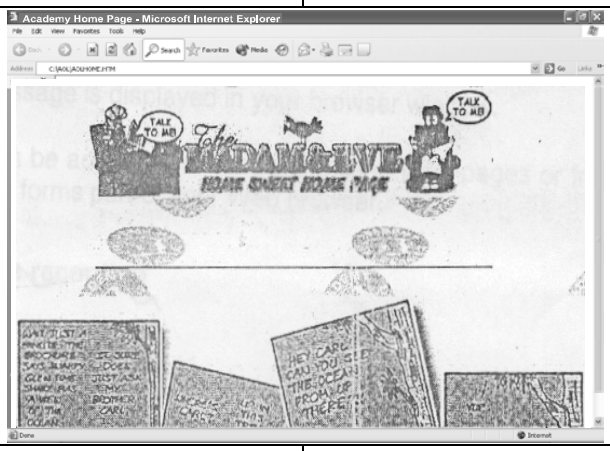
What you do	Comments/Prompts
6. buttons.	As your cursor passes over a text hotspot the cursor changes shape as shown above. To activate a link, simply position your cursor on the desired hotspot and click your primary mouse button. We will activate the Company Profile link.
7. **Company Profile** button and click your mouse once. 	The following page will be displayed in your browser. You have just followed a link to another web page. Note the new URL address displayed in the Address box.



3.3 Exercise 4: Using the Address Box

Objective: To navigate using the address box

Before you begin: Ensure that your Internet Browser is open and that the Start Page is displayed on the screen.

What you do	Comments/Prompts
1. Click on the text entry in the URL address box	The entry is selected.
	
2. Type: file://c:\aol\cartoon.htm Press: **<Enter>**	The following age is loaded
	
3. Click on the text entry in the URL address box	The entry is selected
4. Type: ://c:\aol\aolhome.htm Press: **<Enter>**	The Home Page is loaded
5. Close Internet Explorer	

3.4 Newsgroups

The next area of the Internet that we will look at in this course, is that of Newsgroups. The area on the Internet that comprises thousands of newsgroups is known as the Usenet.

A Newsgroup is basically an electronic bulletin board where messages are left (similar to e-mail – about which you will learn more in the second part of this course) for others to see and respond to if necessary. It is here that we have two-way communication. For example, you may have a question regarding your PC that nobody (that you know) can help you resolve. By using a newsgroup you can post the question and receive replies from anywhere in the world.

Newsgroup messages are stored on Internet servers, called News Servers, which are located throughout the world. Each Internet Service Provider (ISP) supplies a news server for use by all of its subscribers. The news server is divided into categories with each category being a newsgroup and each newsgroup having links to other servers on the Internet that contains the same category or newsgroup.

When you post a message to a newsgroup, it is posed onto your ISP's news server. When you view the messages in a newsgroup, the server automatically activates the links and scans the other servers for messages in the requested category. When you look at a list of articles in a newsgroup you can see each message header, when the relevant header is activated (double-clicked on) a connection with the appropriate server is made and the message is displayed in your browser window.

The newsgroups can be accessed either from links in the Web pages or from an integrated news browser which forms part of your Web browser.

4.0 CONCLUSION

Here you opened the Explorer and carried out stipulated exercises.

5.0 SUMMARY

An important area of internet is the Newsgroups.

6.0 TUTOR-MARKED ASSIGNMENT

You wish to send an e-Mail message to a fellow teacher in the same school where you teach. Attached to this e-mail is a draft copy of an exam paper that you have set. Explain how you would go about creating the e-mail, attaching the document containing the exam paper and finally sending the e-Mail.

7.0 REFERENCES/FURTHER READING

French, C. S. (1998). *Data Processing and Information Technology*. Gosport, Hants: Ashford Colour Press.

UNIT 4 ELECTRONIC MAIL

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        3.1.1 Microsoft Outlook – Inbox
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    3.3 Exercise 5: Creating and Sending E-mail
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Each main user has a "mailbox" which is accessed via a computer terminal within the system by entering a password. Messages are drawn to user's attention when they enter the system.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- use the electronic mail (e-mail).

3.0 MAIN CONTENT

3.1 Electronic Mail

Electronic mail is a network feature that has no equivalent in standalone computing. It is one of the most useful features of networking. Electronic mail (or e-mail) allows users to send messages and files to selected users or groups of users, while preserving the privacy of sensitive information.

Another advantage of e-mail is that the person to whom a message is addressed does not have to be attached to the network, when a message is sent, to receive it. If a person, who is not attached to the network, is sent a message, that message will be stored in the e-mail database until that person attaches to the network.

Electronic mail can also be sent to remote locations via the telephone system, provided the network software supports this feature. This makes it easy to communicate with people anywhere in the world quickly and cheaply. An e-mail message from South Africa to the UK costs about half of what a fax containing the same message would cost.

On this course you will use the program Microsoft Outlook to learn how to send mail.

3.1.1 Microsoft Outlook – Inbox

Microsoft Outlook provides an electronic mail tool called the Outlook Inbox. As you work through this section you will be exposed to the two basic Outlook operations, that of sending and receiving e-mail from others in your workgroup.

By default, when Outlook is launched it will display your **Inbox**, listing all received electronic mail. Should the **Inbox** not be the current folder,

simply click on the **Inbox** shortcut, located in the Outlook Shortcuts group. The following Inbox folder will be displayed.

Figure 4.1: The Inbox Folder

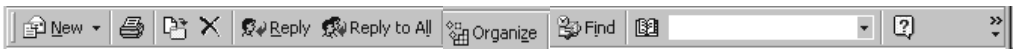
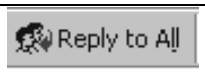
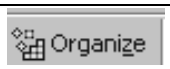


Figure 4.2: Standard Toolbar options available for the Inbox Folder

Table 1 below: summarises the functions of the available tools.

Tool	Function
New **New Mail Message**	Activates the New Message dialog box; used to create a new mail message.
Print	Prints the active folder or selected items. Please note that this method of activating print does not call up the print dialog box. To set print options, you would need to select **File, Print**…
Move to Folder	Enables you to move the selected item or items to a specific folder.

 **Delete**	Used to delete items in a folder or the entire folder
 **Reply**	Click on this button if you wish to reply to the sender only. The **Message Reply** window will be displayed.
 **Reply to All**	Click on this button if you wish to reply to the sender and all recipients of the message. The **Message Reply** window will be displayed.
 **Send/Receive**	This button may be used to check for mail waiting in your postbox or to send outgoing mail.
 **Organize**	This feature allows you to organise the Inbox. You can create rules through which future information will automatically be organised, change view and manage junk e-mail messages. this is a new feature in Outlook 2000.
 **Address Book**	Used to look up e-mail and fax information when you address messages.
 **Find a Contact**	Used to find information about a contact stored in the Contacts folder.
 **Microsoft Outlook Help**	Activates Microsoft Outlook Help.

3.2 Creating an E-Mail Message

The procedure to create an electronic e-mail is as follows:

- The first step is to click on the New Mail Message button located on the standard toolbar (click on the picture, not the drop-down arrow).

 **New Mail Message button**

- Outlook will display the following Message window with a label of "Untitled".

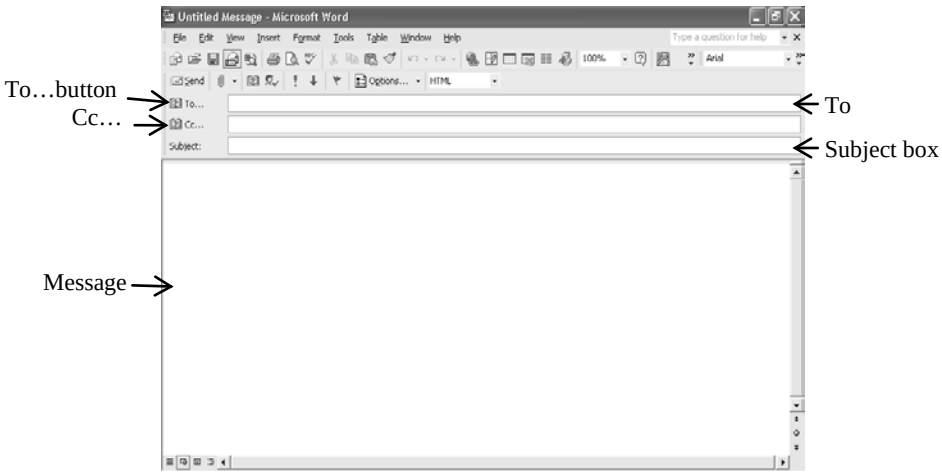


Figure 4.3: The New Message Window

Study Figure 4.3 carefully.

The cursor automatically goes to the **To…** box. This is where the e-mail address/addresses of the recipient/recipients is/are typed.

The **Cc…** box is used if you want to send the same message to another person.

The **Subject**: box is for you to give your message a subject heading.

The box underneath subject is the **Message** detail box and is used to write the contents of your message.

- The next step is to address the message. To do this we will select the name of a recipient from the Post Office list. Click your primary mouse button on the **To** button to display the following **Select Names** dialog box:

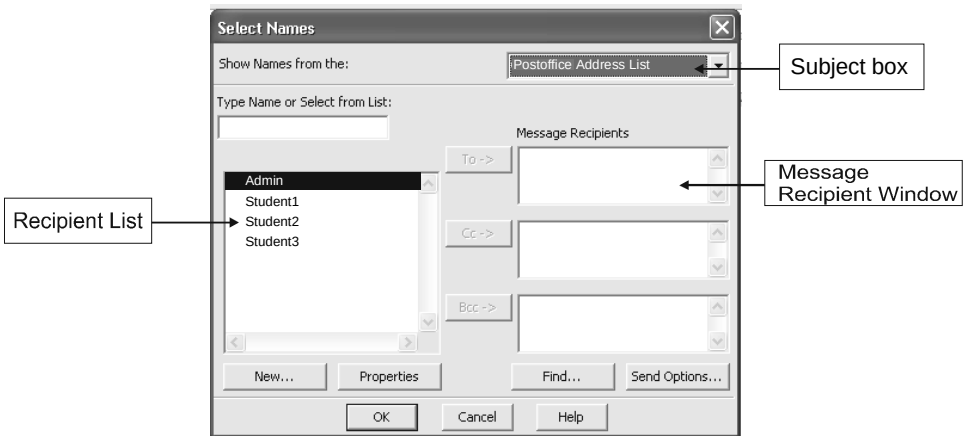
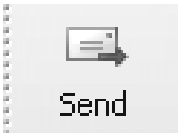


Figure 4.4: Select Names dialog box

- Change the **Address** list to display the **Post Office Address List** as shown above. When the **Address List** is changed, all available recipients will be displayed in the **Recipient List** window.
- Select the name(s) of the individual(s) to receive your message by double clicking on the name(s) displayed in the list of recipients. (In Exercise 5 later in this module, you will send the first message to **Student2.**)
- The name(s) of the chosen recipient(s) will display in the **Message Recipients** window. Next click on the **OK** button. This will close the **Select Names** dialog box and place the recipient name(s) in the window of the new message.
- Type a subject heading in the Subject window. you will notice that the **Subject** is used as the message title in the title bar.
- Enter the message details into the message window. The message window will appear similar to *Figure 4.5* below:

Figure 4.5: Completed message

- To send the message, click on the **Send** button located in the message window

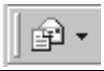
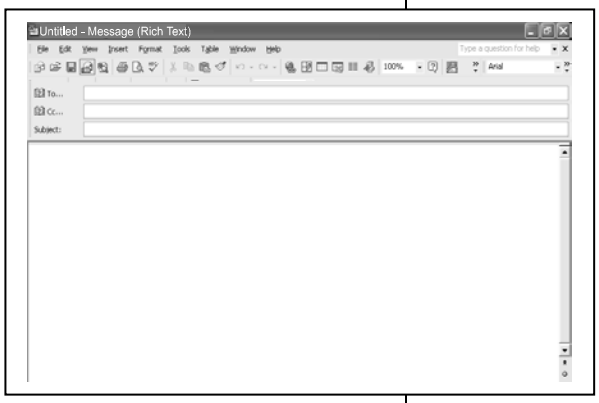


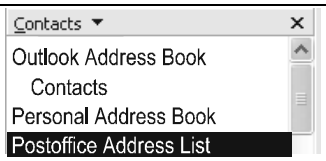
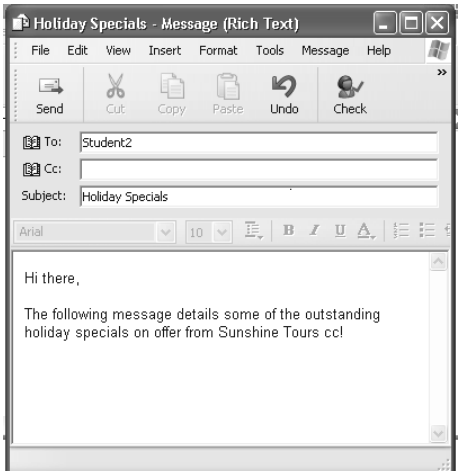
Send button

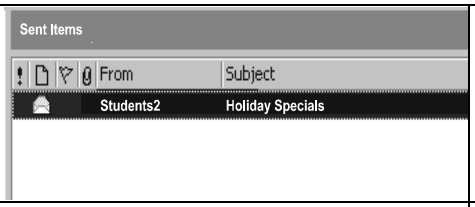
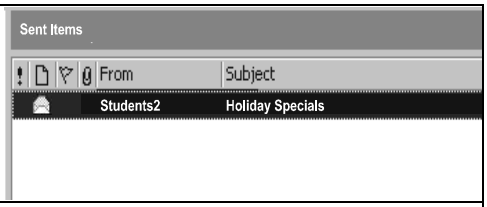
3.3 Exercise 5: Creating and Sending E-mail

Objective: To create and send an e-mail message

Before you begin: Launch Outlook 2000. (In the first few steps of the exercise you will be guided to select the user profile, Student1 and to Logon as Student1)

What you do	Comments/Prompts
1. When prompted select the Profile Name: **Student1** Click on **OK**	
2. In the Microsoft Mail logon dialog box logon as: Mailbox: **Student** Password: **Password** Click on the **OK** button.	The Inbox folder for Student1 will be displayed. (If it is not, click on the Inbox shortcut.
3. Click on the **New Message** button. 	The following message window will appear.
4. Click on the To… button 	The following Select Names dialog box will be displayed.
5. Click on **Show** Names from the: drop-down arrow and click on the **Post Office Address List** Option if Necessary.	The Post Office Address List is selected and all available recipients should appear in the Recipient List window.

	
6. Double click on **Student.**	Student2 is selected and the name appears in the Message Recipients window.
7. Click on the **OK** button.	You are returned to the message window. You will notice that the name **Student2** appears in the To… box
8. Type: **Holiday Specials**	
9.	The subject of the message is entered, and the insertion point moves to the Message box.
10. Type: **Hi there,**	
11. Press: **<Enter> <Enter>**	
12. Type: The following message details some of the outstanding holiday specials on offer from Sunshine Tours cc!	The text of the message is entered. You are now ready to send it.
	
13. Click on the **Send** button 	The message is sent, and the Message window is closed.
14. In the Outlook Bar, click on the **My Shortcuts** group button.	
15. Click on the **Sent Items** shortcut. 	The contents of the Send Items folder are displayed. Notice that the message you have just sent appears in the list.

	
16. following message: Recipient: **Student 3** Subject: **Overseas Travel** Message: **The cost details due today but have not as yet been received. Please advise me as to the status of your proposal.**	The message is sent.
17. following message: Recipients: **Student2 & 3** Subject: **Golf Date** Message: **This month's golf name will be held next Friday at the Riverside Country Club, Tee-off 07:30 a.m. See you there!**	The messages are sent.
18. Select the **My Shortcuts** group in the Outlook bar.	
19. shortcut	The content of the Sent Items folder is displayed.
20. Select File, Exit and **L**og Off	You are returned to the Windows desktop.

4.0 CONCLUSION

The mailing system provides computerized ways of preparing, entering and editing text.

5.0 SUMMARY

The mailing system provides means of filing and retrieving messages.

6.0 TUTOR-MARKED ASSIGNMENT

Create an e-mail and send it to the Co-ordinator of National Open University.

7.0 REFERENCES/FURTHER READING

French, C. S. (1998). *Data Processing and Information Technology.* Gosport, Hants: Ashford Colour Press.

UNIT 5 READING AND RESPONDING TO AN E-MAIL MESSAGE

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Reading and Responding to an E-Mail Message
3.2 Placing an Attachment to an E-Mail Message
3.3 Reading a Message Attachment
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

1.0 INTRODUCTION

Here you will send more e-mail messages

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- reply to an e-mail message
- place an attachment to an e-mail message
- read a message attachment.

3.0 MAIN CONTENT

3.1 Reading and Responding to an E-Mail Message

As mentioned earlier, all incoming mail messages are stored in the **Inbox.**

The procedure to display an electronic mail message is detailed as follows:

- Double click on the relevant message in the **Inbox** listing. The message will open and be displayed in a message window.
- Whilst working in the message window, if you wish to view either the next or the previous message, simply click on the up or the down arrow.

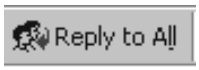
Previous Item button **Next Item button**

The procedure to respond to an electronic e-mail message is detailed as follows:

- In the message window, if you wish to reply only to the sender, click on the **Reply** button.

Reply button 

- If you wish to reply to the sender and all of the recipients of the message, click on the **Reply to All** button.

Reply to All button 

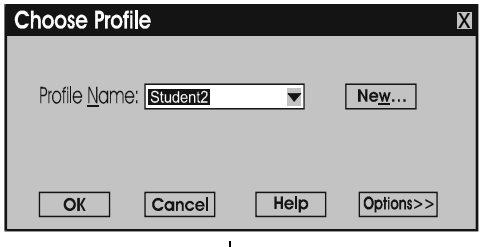
When clicking on either of the above buttons the **Message Reply** window will be displayed. By default the recipient name is automatically entered together with the original message. Scroll to the end of the original message and type your reply before clicking on the send button.

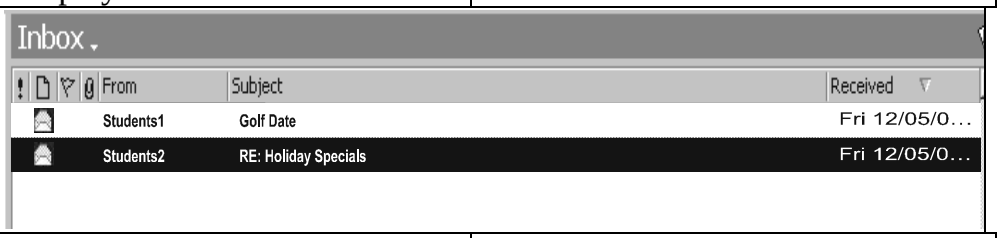
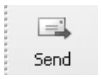
SELF ASSESSMENT EXERCISE 1

Replying to a Message

Objective: To reply to an e-mail message.

Before you begin: Launch Outlook 2000. (NB: In the first step of the Exercise you will be prompted to logon as Student2.

What you do	Comments/Prompts
1. Profile Click on **OK**  	
2. dialog box logon as: Mailbox: **Student2**	

3. Click on **OK**	The Inbox folder for Student2 will be displayed. Next you will check the mailbox for new mail.
4. for new mail.	The Delivering Messages dialog box is displayed.
5. and any new messages will be displayed.	The messages will be displayed in the message list as follows:
	
6. **Date** message	The message will be opened, and displayed in the message window.
7. click on the **Close button** Message window.	The Message window is closed. You will now respond to a message.
8. **Holiday Specials** message	The message is re-displayed.
9. 	The Message Reply window is displayed.
10. point is located in the message area (immediately above the original message). Type: **Thank you for your message. I will submit a detailed reply by noon today.**	The reply is entered.
11. 	The reply is sent, and the original message is redisplayed.
12. the Title bar of the Message window.	The Message window is closed.
13. necessary by pressing **<F5>**.	
14. Select: **File, Exit and Log off**	You are returned to the Windows desktop.

15. the **Student1** profile name and logon as Student1. Press **<F5>**. Read your Messages	The message is displayed.
16. program	You are returned to the Windows desktop.

3.2 Placing an Attachment to an E-Mail Message

So far, we have looked at sending and receiving standard e-mail messages using Outlook. If you wish, include items such as graphics, sounds, text and other information by attaching the relevant file to your e-mail message.

The procedure to attach a file to an electronic e-mail message is detailed as follows:

- Ensure that you are in the Message window, the click on the **Insert File** button.

 **Insert File Button**

- In the **Insert File** dialog box that is displayed, select the relevant the name and click on the **OK** button. the message window will now display a file icon in the message as per the following example:

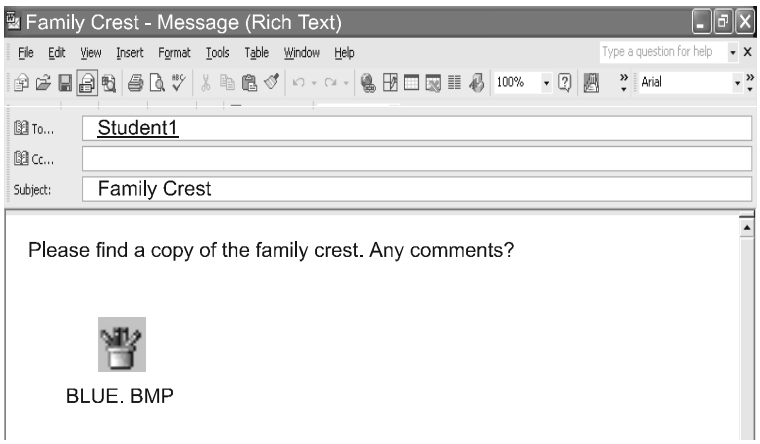


Figure 7.10: Message with a File Attachments

Click on the **Send** button.

5.3 Reading a Message Attachment

It is possible to read an attachment without saving it first. Remember that you must have the application that the attachment is written in, in order to read it. To identify whether a message has an attachment, you will see a paperclip next to the message.

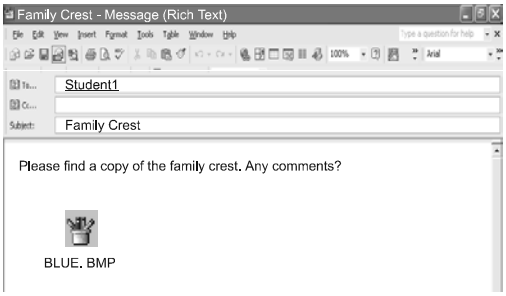
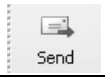
To read the attachment the mouse must be placed on the message. Click the right hand button on the mouse. Select view and the attachment will open.

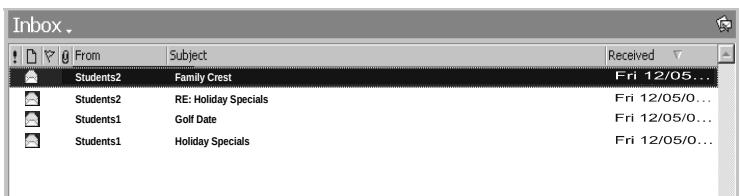
SELF ASSESSMENT EXERCISE 2

Objective: To send a new e-mail message which contains an attachment.

Before you begin: Launch Outlook 2000. (NB: In the first step of the Exercise you will be prompted to logon as Student2.)

What you do	**Comments/Prompts**
1. When logging onto **Outlook**, use Profile Name: **Student2** In the Microsoft Mail logon dialog box, logon as: Mailbox: **Student2** Password: **Password**	The Inbox, folder for Student2 will be displayed.
2. Click on **OK**	Next you will check the mailbox for new mail using **<F5>.**
3. In the Inbox folder click on the **New Mail Message** button 	The Message window is displayed.
4. Click on the **To…button.**	The select Names dialog box is displayed.
5. In the list of users, double click on the name **Student 1**, then click on the **Ok** button	The recipient is selected, and the Message windows is redisplayed.
6. Click in the **Subject** box.	The subject of the message is

Type: **Family Crest** Press: **<TAB>**	entered, and the insertion point moves to the Message box.
7. Type: Attached please find a copy of the family crest. Any comments?	
8. Press: **<Enter>** twice	The text of the message is entered. You will now attach an external graphic file.
9. Click on the **Insert File** button 	The Insert File dialog box is displayed.
10. Switch to folder **A:**	The files from your data folder are displayed
11. In the list of filenames, click on **Blue.bmp.**	The filename is selected.
12. Click on the **Insert** button 	The dialog box is closed, and the file is attached to the message. Notice that an icon representing the attached file appears below the message.
13. Click on the **Send button** 	The message is sent, and the Message window is closed.
14. **File, Exit** and **Log off** Outlook	
15. Launch Outlook using Profile Name: **Student 1**	
16. Mailbox: **Student 1** Password: **Password**	
17.	The Inbox is displayed.
18.	The inbox listing is refreshed and displays any new mail received.



19. Double click on the Family Crest message.	The message is opened. Next you will view the attachment.
20. In the newly displayed message there is an icon labeled **Blue.BMP** Double click on this icon.	The attached file is opened and displayed in Paint.
21. Exit **Paint** and Exit and Logoff **Outlook.**	You are returned to the Windows desktops.

4.0 CONCLUSION

You are now in a position to read and respond to e-mail messages.

5.0 SUMMARY

E-mail addresses have standard format.

6.0 TUTOR-MARKED ASSIGNMENT

Send another E-Mail message to the co-ordinator, National Open University.

7.0 REFERENCES/FURTHER READING

French, C. S. (1998). *Data Processing and Information Technology.* Gosport, Hants: Ashford Colour Press.

NATIONAL OPEN UNIVERSITY OF NIGERIA

Form QST1
Questionnaire

Dear Student,

While studying the units of this course, you may have found certain portions of the text difficult to comprehend. We wish to know your difficulties and suggestions, in order to improve the course. Therefore, we request you to fill out and send us the following questionnaire, while pertains to this course. If you find the space provided insufficient kindly use additional sheet.

Course Code:_____
Course Title:_____

1. How many hours did you need for studying each of these units?

Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
No. of hours															
Unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
No. of hours															

2. Which of these units do you find most difficult to understand?

3. Please give specific problem you find difficult with the unit.
   _____
   _____
   _____
   _____

4. How would you like the unit improved?
   _____
   _____
   _____

Please Mail to
The Course Coordinator……THROUGH the Study Centre Manager
National Open University of Nigeria
Victoria Island,
Lagos.

NATIONAL OPEN UNIVERSITY OF NIGERIA

Form QST2
Questionnaire

In the questions below, we ask you to reflect on your experience of the course as a whole.

1. Course Code and Title……..……..

2. Mother tongue…….……..

3. I am registered for a……Degree/Programme

4. Why did I choose to take this course?.....

5. Which study unit did I enjoy the most and why?.....

6. Which study unit did I enjoy the least and why?.....

7. Was the course material easy to understand or difficult?.....

8. Which particular topic do I understand better than before and how?.....……...……

9. Does the course have any practical applications in the real world, e.g. for the work I Currently do?.....YES/NO? Explain……

10. What aspects would I like to know more about or study further?.....……

11. How could the course be improved?.....

12. Other comments about the course ***(Please Tick)*****…….**

Items	**Excellent**	**Very Good**	**Good**	**Poor**	Give specific examples if poor
Presentation Quality	☐	☐	☐	☐	_____ _____
Language and Style	☐	☐	☐	☐	_____ _____
Illustrations Used (diagrams, tables, etc.)	☐	☐	☐	☐	_____ _____ _____
Conceptual Clarity	☐	☐	☐	☐	_____ _____
Self Assessment Questions	☐	☐	☐	☐	_____ _____ _____
Facilitators response To TMA Questions	☐	☐	☐	☐	_____ _____ _____