WEB DEVELOPMENT AND DATABASE ADMINISTRATION

LEVEL -I

Based on March, 2022, Curriculum Version 1

Module Title: Operate Personal Computer

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Prepared by: Ministry of Labor and Skill

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Table of Contents

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Acronyms

AC   Alternative Current

CD   Compact Disk

CPU   Central Processing Unit

DC   Direct Current

Dpi   Dots per inch

DVD   Digital Versatile Disk

GUI   Graphic User Interface

ICT   Information Communication Technology

LAP   Learning Activity Performance

PC   Personal Computer

VDC   Visual Display Unit

OHS   Occupational Health service

Introduction to the module

A personal computer is a computer small and low cost, which is intended for personal use (or for use by a small group of individuals). The term "personal computer" is used to describe desktop computers (desktops).

This module defines operate a personal computer, including starting the PC, logging in, using and understanding desktop icons and their links to underlying programs, navigating a directory structure, saving work, printing, closing down the PC and word processing.

Module Unit

- Start the computer
- Access basic system information
- Navigate and Manipulate desktop environment
- Organize basic directory/ folder structure and files
- Organize files for user and/or organization requirements
- Printer installing

At the end of this session, the trainee will able to:

- Operate a personal computer,
- Starting the computer, logging in/off
- Understanding desktop icons
- Perform Navigating a directory structure, saving work,
- Printing document
- Install different printer
- Viewing printer job

Module Learning Instructions:

- Read the specific objectives of this Learning Guide.
- Follow the instructions described below.
- Accomplish the "Self-check".
- If you earned a satisfactory evaluation from the "Self-check" proceed to "Operation Sheet".
- Do the "LAP test" if you are ready.

UNIT ONE: START THE COMPUTER

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- Checking Peripheral device connections.
- Checking Input voltage for the device based on OHS Standards
- Switching on Power at both the power point and computer.
- Using basic input device

This unit will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Check peripheral device connections for correct position
- Understand OHS standards
- Perform checking input voltage for the device based on the OHS standards
- Perform switch on and off computer power

1.1 Start the computer

1.1.1 Introduction to Computer

An electronic device that can store, retrieve and process data, and can be programmed with instructions that it remembers. The physical parts that make up a computer (the central processing unit, input, output and memory) are called "hardware". Programs that tell a computer what to do are called "software".

| INPUT | ⇨ | PROCESS | ⇨ | OUTPUT |

Figure1. 1 Information cycle

A computer (also referred to as a PC) can be used for various functions, e.g., word processing, spreadsheets, databases, business accounting, desktop publishing, accessing the Internet, sending email, playing games, movies, music, etc.

1.1.2 Identify the parts of computer

A peripheral device is defined as a computer device connects to a computer system to add functionality., such as a keyboard or printer, that is not part of the essential computer (i.e., the memory and microprocessor). These auxiliary devices are intended to be connected to the computer and used.

there are many different models of personal computers. They include desktop personal computers (PC), notebooks and Laptops but they all have the same basic hardware parts:

- keyboard
- mouse/touch pad/trackball
- monitor (screen)
- System unit.

The diagram below shows a typical set up of a personal computer.

1. **Monitor (or Screen or VDU - Visual Display Unit)**

The monitor (or screen) enables the operator to view data (and to alter it before printing it out).

2. **Keyboard**: The computer keyboard has the standard QWERTY layout with extra keys for specific functions.

3. **Speakers**: The speakers play sound when on-capable features are accessed on the computer.

4. **Mouse**: A mouse is used to select menu options, text and graphics displayed on the monitor.

5. **Printer**: A printer is used to print text and graphics onto paper.

Figure1. 2 The typical set up of a personal computer

6. System unit containing CPU (Central Processing Unit)

A chip (called a Central Processing Unit) within the system unit processes data and relays messages to and from the keyboard, monitor, disk drives and printer.

The Central Processing Unit (CPU) is the brain of your computer.   It is a "chip" where your computer interprets and processes information.

7. **Hardware:** The physical components of a computer system - everything that you can touch - are called **hardware**.

8. **Software:** The programs used on a computer are called software**.** This includes system software and application software such as MS-Word, MS-Excel, etc.   System software is necessary in order to run a computer and all applications within it.

9. Hard Disk and CD ROM Drives

Drives are used to store and access data. A hard disk drive is a permanent storage device within your computer. CD-ROM drives allow you to read data from portable media (CD).

10. Video card

A video card fits inside your computer and determines the resolution (fineness of information) and number of colors your monitor can display. In addition to some video cards allow the display of graphics such as graphs, circles and geometric designs as well as text.

11. Memory

The memory is not a permanent storage place for information. It is only active while your

computer is turned on. To avoid losing your work you should save data on a disk (i.e., hard disk or floppy disk) for permanent storage.

A. Compute component

The computer system needs people, data, hardware and software to operate. The process for getting data in, processing the data and getting the information out is known as **input/process/output**.

1. **Input: -** is the data that is entered into the computer. It is entered through input devices. Some examples of input devices are:

- mouse
- keyboard
- microphone
- scanner
- digital camera

- joy stick
- touch pad
- MP3 player
- Digital video player (plays DVDs).

Figure1. 3 Output Device

i. Using the mouse

One of the most useful tools for working on a computer is the mouse. The mouse is used to move a pointer or cursor around the screen, in order to select a button or icon to perform a particular task, or to access, move or copy data.

Mouse pointer: the arrow will match the movement on the screen. To move the mouse pointer, move the mouse across the mouse pad and watch the pointer on the screen move in the same direction.

Some common ways that you can use a mouse with two buttons include:

- **Single Click** = quick click of the LEFT Mouse Button
- **Double Click** = two quick clicks of the LEFT Mouse Button.
- **Triple Click** = three quick clicks of the LEFT Mouse Button.
- **Right Click** = quick click of the RIGHT Mouse Button.
- **Drag and Drop** = Pressing and HOLDING the LEFT Mouse Button and SLIDING the pointer across the screen.
- **Scrol**l = Rolling the Scroll wheel when the Window is showing a more than one page of information.

A mouse may also have the additional feature—a scroll wheel—that enables you to use the mouse to scroll up and down a window instead of using the window's scroll bars

Figure1. 4 A mouse with two buttons and a scroll wheel

ii.   **Keyboard: -** A keyboard is a peripheral device that enables a user to input text into a computer or any other electronic machinery. A keyboard is an input device and is the most basic way for the user to communicate with a computer.
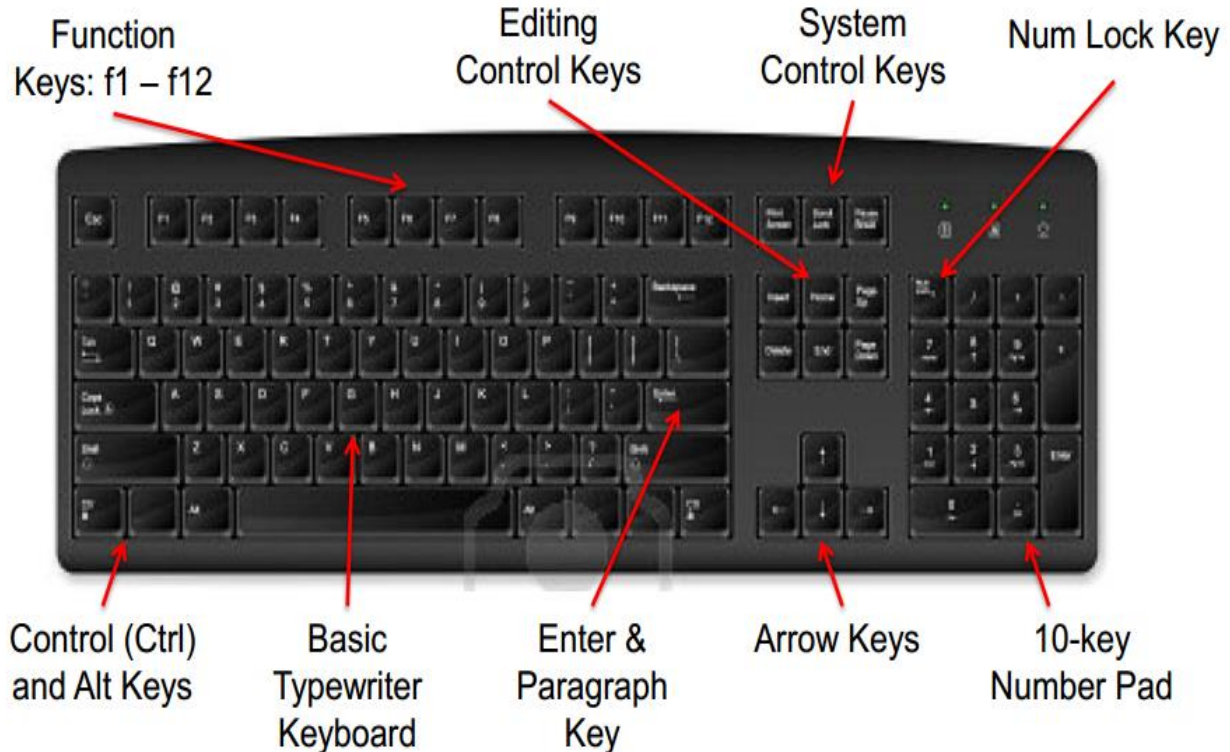
Figure1. 5 Keyboard Layout

2. **Output: -** is what the computer displays as a result of processing data (e.g., calculations or instructions). Some examples of output devices are:

1. printers
2. speakers
3. monitor/screen.

Figure1. 6 Keyboard Layout

3. **Process: -** refers to the computer performing operations and calculations (using the data that has been input and software). This processing of data is done by the central processing unit (CPU) that is housed in the system unit.

Table 1. 1 Components of Computer system

Hardware		Software
Peripherals:		**Operating System**
		Microsoft Windows
		Application Software
		Microsoft Word
Mouse	External CD Writer	Microsoft Excel
Monitor	Printer	Microsoft PowerPoint
Keyboard	Scanner	Computer Games

1.2 OHS standards

Occupational Health and Safety (OHS): - A planned system of working to prevent illness and injury where you work by recognizing and identifying hazards and risks. Health and safety procedure is the responsibility of all persons in the computer and technology industries.

1.2.1 Purpose of OHS

The purpose of the Health and Safety policies and procedures is to guide and direct all employees to work safely and prevent injury, to themselves and others. All employees are encouraged to participate in developing, implementing, and enforcing Health and Safety policies and procedures.

1.2.2 Categories of hazards

i. Biological. Biological hazards include viruses, bacteria, insects, animals, etc., that can cause adverse health impacts.

ii. Chemical. Chemical hazards are hazardous substances that can cause harm. Gases, dusts, fumes, vapors and liquids.

iii. Physical: Slippery floors, objects in walkways, unsafe or misused machinery, excessive noise, poor lighting, fire.

iv. Ergonomic: poor design of equipment, workstation design, (postural) or workflow, manual handling, repetitive movement.

1.2.3 Basic workplace hazards in IT

The most common hazards in IT are Ergonomics. It is the study of people at work that aims to reduce the physical stress and resulting injuries associated with working, such as overuse injuries, poor posture and more serious muscle skeletal disorders. Ergonomics aims to reduce such injuries by designing work spaces, tools, tasks and equipment that help maintain the physical health of workers.

Figure 1.7 comfort work place

1.2.4 Safety issues in IT

There are a number of safety issues that can arise from using ICT devices. Some of these safety issues include:

1. Most ICT devices require an electrical power source. Whenever you have electrical power sources you run the risk of the electrocution.

2. ICT devices with wires can make a room a potential hazard. Trailing wires are easy to trip over if they are not secured or tucked away.

3. Some ICT devices (like computer screens) are fairly heavy and can cause injury if they fall on you**.** Equipment should be positioned securely on strong desks and tables well away from the edge**.**

4. ICT devices require power from a mains outlet. If too many devices are plugged into a single main at the same time it is possible to overload the circuit and start an electrical fire**.** You need to ensure that your room has many plug sockets so you don't have to overload any single one.

A. Health problems

There are a number of health problems that you can suffer if you use ICT devices incorrectly or for too long. The main ones are:

1. Repetitive Strain Injury (RSI)
2. Back and Neck Strain
3. Eye Strain and Headaches

Description of these health problems, their causes and how to prevent them

1. RSI causes painful swelling of the wrist and fingers. Sufferers with really bad RSI are unable to use their hands at all.

2. RSI is caused by doing the same small movements over and over again across a long period of time. For example, clicking a mouse button repeatedly.

3. Computer users who type and use a mouse all day long are commonly affected.

4. Back ache and neck ache can cause great pain and really affect the quality of your life. Both back and neck ache can be caused by sitting incorrectly and using poor quality chairs without back rests. This is called poor posture

   Staring at a computer screen for too long can strain your eyes and cause headaches. Eye strain can cause your vision to blur. Common causes of eye strain are screen flicker and having direct light causing screen glare

B. Safety issues

There are a number of safety issues that can arise from using ICT devices. Some of these safety issues include:

1. Electrocution
2. Tripping over wires
3. Heavy equipment falling on you

4. Fire risks

1.3   Check input voltage

Computer consists of several interior components, such as coils, capacitors, and electronic circuit boards to regulate current. Your power supply unit requires fans to cool down the interior components, but fans are one of the primary reasons for power supply failure. You will also find colored wires attached to the circuit board, and these wires are used to transmit various voltages to the main board and any connected devices. The typical PC power supply draws approximately 110 volts of alternating electrical current from the wall outlet, which converts to a much smaller unidirectional flow of electrical current.

Alternating current (AC) defines the flow of charge that changes direction periodically. AC voltage is produced by the alternator, which is a special kind of electrical generator used to produce alternating current. Direct current (DC) can be described as a constant voltage or current, which is generated by a rectifier, batteries, or an AC generator that is equipped with a commutator. Modern power supplies are equipped with several safety circuits that check the flow of current continuously to detect extreme power output conditions.

Steps to check the computer power supply voltage

- Plug the power supply into the wall.
- Find the big 24-ish pin connector that connects to the motherboard.
- Connect the GREEN wire with the adjacent BLACK wire.
- The power supply's fan should start up. If it doesn't then it's dead.
- If the fan starts up, then it could be the motherboard that's dead.
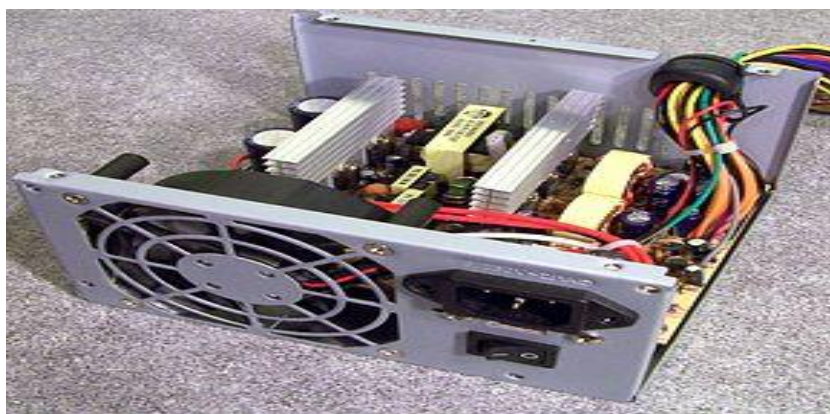

Figure 1.8. Power supply of computer

1.4 Switch on or off computer

A **switched**-mode power supply (SMPS) is an electronic circuit that converts power using switching devices that are turned on and off at high frequencies, and storage components such as inductors or capacitors to supply power when the switching device is in its non-conduction state.

1.4.1 Switch on the computer

Starting your computer is also known as booting the computer. It is important to switch your computer on in the correct way because the computer will check the peripheral devices on start up. Starting the computer will also start the operating system.

A. Logging on

The computer you are using may have been set up so that you need to log on to the computer in order to be able to access the software and stored data, and commence using it. This is a security feature that is often in place for computers in the workplace, school, college or other large organisation.

When you log on you are connecting the computer with a network of other computers in the organisation. If you need to log on you will see a box on the screen asking you for two items of information that you need to type in:

1. Username

2. Password.

Usernames and passwords are set (for each authorized user) by the IT Administrator for the organisation. Your teacher or IT Department (in an organisation) will provide you with these details.

Sequence for switching on power of computer

1. Check peripheral device connections.
2. Turn on power at the power outlet.
3. If the monitor has a separate switch, turn it on.

B. Security conditions

Your username and password determine what information and features of the computer and network you have access to, and this is determined by the IT security policy of the organisation.

Therefore, it is important to note the conditions of use that apply to you when you log on to a computer with your username and password. These conditions appear on the screen before you

are asked to enter your name and password. You must click on the OK button after you have read the conditions. This enables you to get to the log on screen where you enter your name and password.

1.4.2 Switch off the computer

Shutting down a computer closes all open programs and exits the operating system safely so hardware isn't damaged and your operating system isn't corrupted. The sections below explain how to shut down a computer, with instructions for different operating systems.

A. Shutting down a computer

It is good practice to use the correct shut down procedure when you want to turn off your computer so that you do not lose data. If you still have any software applications or files open, they will be displayed at the bottom of the screen. Each of the applications and files must be closed. You may get a message asking you to confirm whether files need to be saved. Make sure you save any work you have done before you turn off the computer.

Depending on whether or not you have had to log on to start using a computer, you will need to follow a different sequence shutting down the computer.

B. Logging off

Logging off means you are disconnecting the computer from the network and no one else will be able to access the same computer unless they also have a log on (username and password). You must log off the computer regardless of whether or not you will be turning off the power.

Sequence for Turn off a computer:

1. Follow this sequence if you do not have to log off first.
2. Close all files (remember to save your latest work if necessary).
3. Close all software programs.
4. Remove floppy disks or other storage media from drives if necessary.
5. Click on Start on the taskbar. Select Turn Off computer from the Start menu.
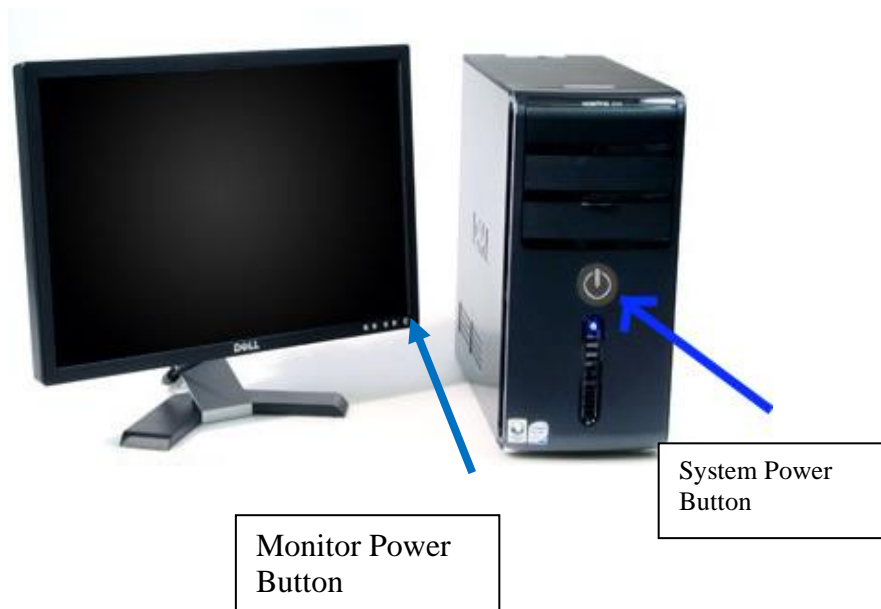6. Check that Turn off is selected.

System Power
Button

Monitor Power
Button

Figure 1.9. Start computer

Self-check-1

Directions: Answer all the questions listed below.

Test-I choose the best answer for the given alternative.

1. If you need to log on you will see a box on the screen asking you for two items of information that you need to type is?

   A. Username and Email

   B. Username and Password

   C. Password and Email

   D. A and B

2. Which one is the first task to start the computer?

   A. Log off

   B. Booting

   C. Shutdown

   D. Connect peripherals

3. If you have had to log on to the computer when you started the session, then you need to _____when you finish your session on the computer.

   A. Log off

   B. Booting

   C. Shutdown

   D. Connect peripheral

Test-II Matching Column "A" with Column "B"

A	B
1. Power supply	A. Starting your computer
2. Booting	B. AC to DC
3. Operating system	C. Windows 10

Test III. Type whether the device is an input device or output device.

Peripherals	Type of Device
Printer	
Speaker	
Monitor	
Scanner	
Mouse	
Microphone	
Keyboard	

Operation Sheet 1.1 On and off computer system

- **Operation title:** switch on and off computer

- **Purpose:** To practice and demonstrate the knowledge and skill required checking the computer switch on and off computer correctly

- **Instruction:** Use the given step below appropriately. For this operation you have given 20 minutes and you are expected to provide the answer.

- **Tools and requirement:**
    1. Computer
    2. Divider
    3. Computer power cable

- **Precautions:** before starting computer identify and plunge the correct peripheral

- **Procedures in doing the task**

    Step 1 Check peripheral device connections.

    Step 2 Turn on power at the power outlet.

    Step 3 If the monitor has a separate switch, turn it on.

- **Procedures in doing the task**

    Step 1 Follow this sequence if you do not have to log off first.

    Step 2 Close all files (remember to save your latest work if necessary).

    Step 3 Close all software programs.

    Step 4 Remove floppy disks or other storage media from drives if necessary.

    Step 5 Click on Start on the taskbar. Select Turn Off computer from the Start menu.

    Step 6 Check that Turns off is selected.

- **Quality criteria:** Correctly plunge peripheral device, start the computer and switch off computer

LAP Test 1

Task 1   Connecting peripheral device.

Task 2   Start up a computer.

Task 3   Shut down a computer.

UNIT TWO: ACCESS BASIC SYSTEM INFORMATION

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- Inserting username and password on introductory screen
- Navigating operating system
- Using On-line help

This unit will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Confirm insert user name and password use displayed on introductory screens
- Perform navigate operating system to access system information
- Perform on-line help functions as required

2.1 Insert user name and password

An operating system allows your computer to manage software and perform essential tasks. It is also a Graphical User Interface (GUI) that allows you to visually interact with your computer's functions in a logical, fun, and easy way. Interact with your computer's functions in a logical, fun, and easy way. The first screen appears after you turn on the power of computer is a desktop
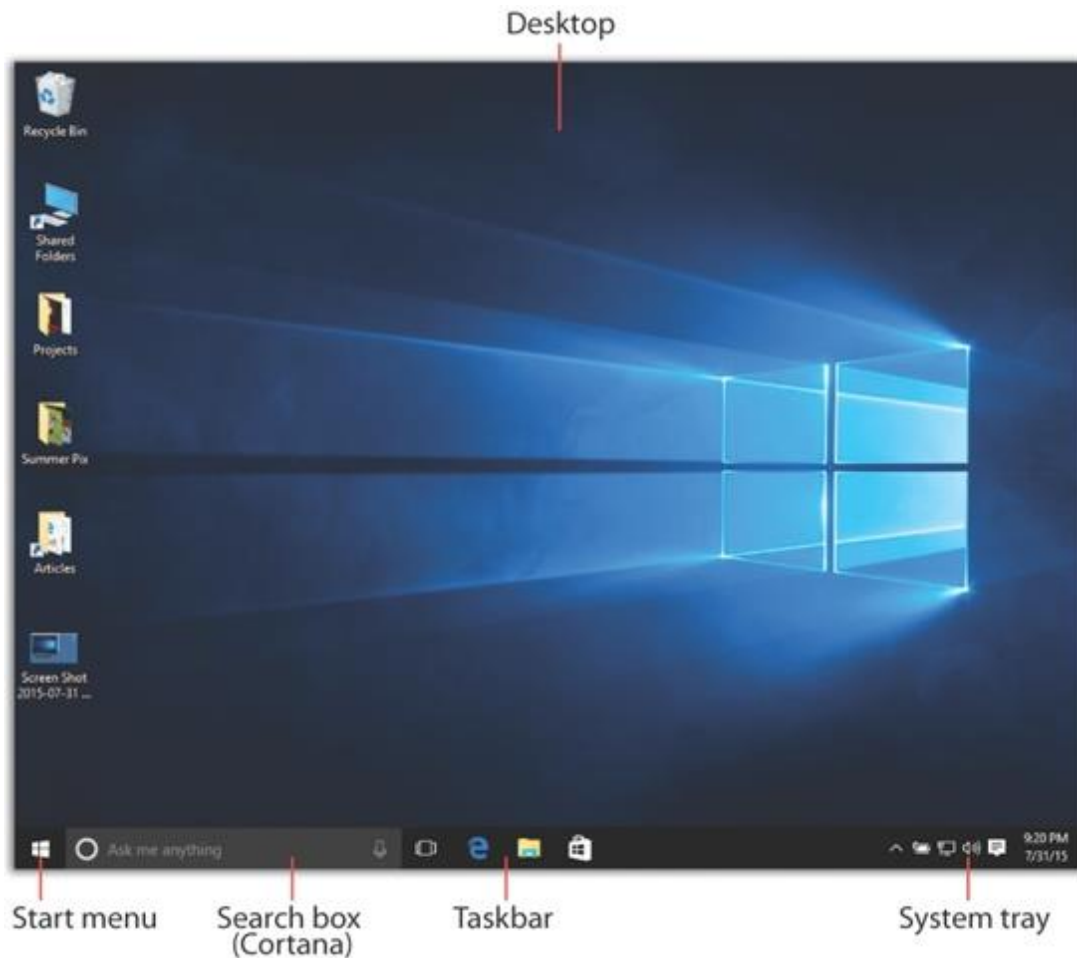

Figure 2. 1 Windows 10 screen

If it is a shared PC; more than one user uses it, or one user with password protected, you will arrive at Welcome Screen you can select the proper username and enter password
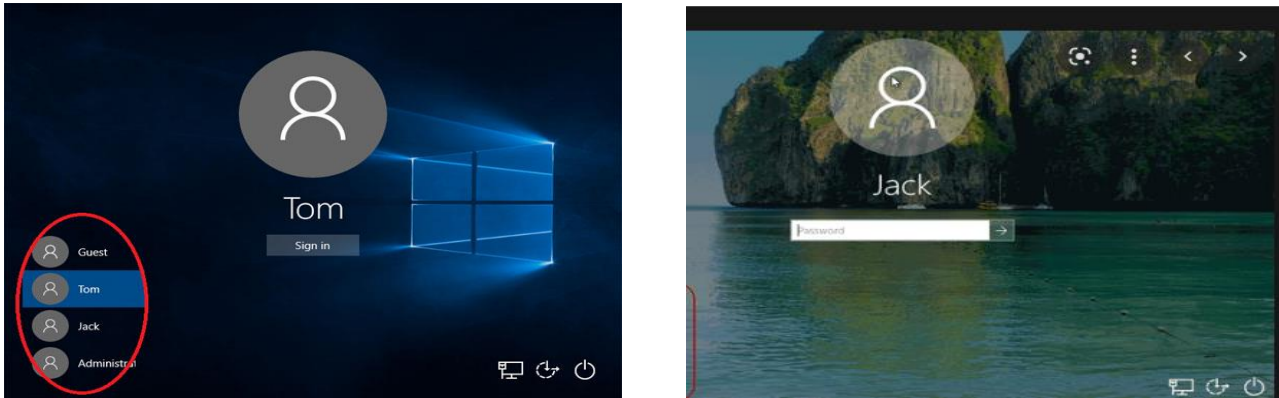
Figure 2. 2 Windows 10 user selection screen

2.2 Navigate operating system

Once your computer has finished starting up, the first thing you'll see is the desktop. You can think of the desktop as the main workspace for your computer. From here, you can view and manage your files, open applications, access the Internet, and much more.

1. Working with windows

Whenever you open a file, folder, or application, it will appear in a new window. You can have multiple items open at the same time in different windows. it's important to know how to switch between open windows, how to move and resize windows, and how to close windows when you're done using them.

2. Parts of a window

You'll see the same three buttons in the upper-right corner of almost every window. These buttons allow you to perform several functions, including these below.

A. Click the Minimize button to hide the window. The window will be minimized to the taskbar. You can then click the icon for that window on the taskbar to make it reappear.

B. Click the Maximiz**e** button to make the window fill the entire screen**.**

C. If the screen is maximized, the Maximize button will be temporarily replaced by the **Restore** button. Just click it to return the window to its original size.
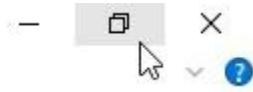
D. Click the **Close** button to **close** the window.

3. **To move a window**

Click and drag the top of the window to move it to the desired location on the screen. When you're done, release the mouse.

The window will appear in the new location.
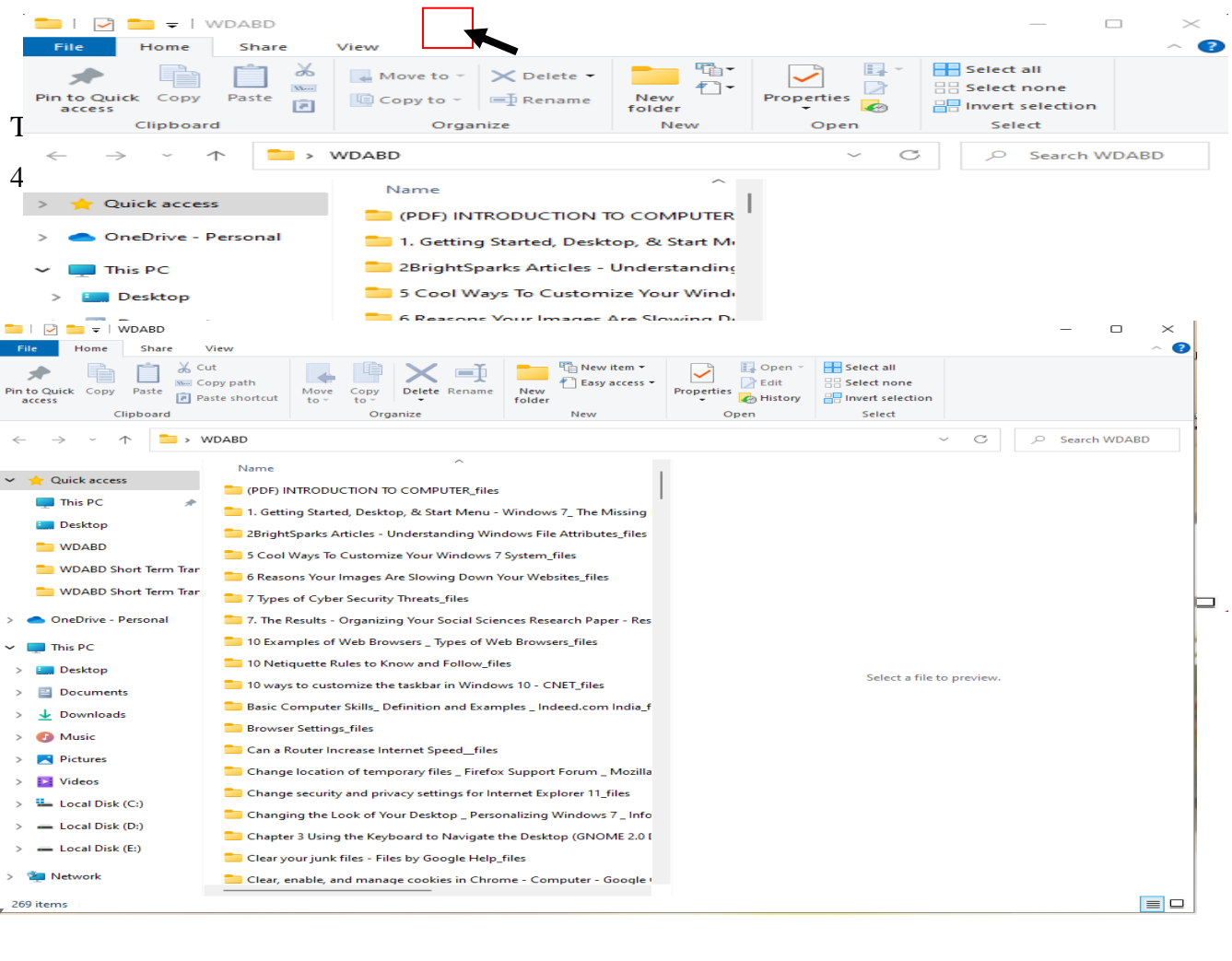
Figure 2. 3 Resize windows

5. Change the date and time

Follow these steps to change the date and time on your computer clock.

1. Right-click on the time in the bottom-right of the screen and select Adjust Date/Time.
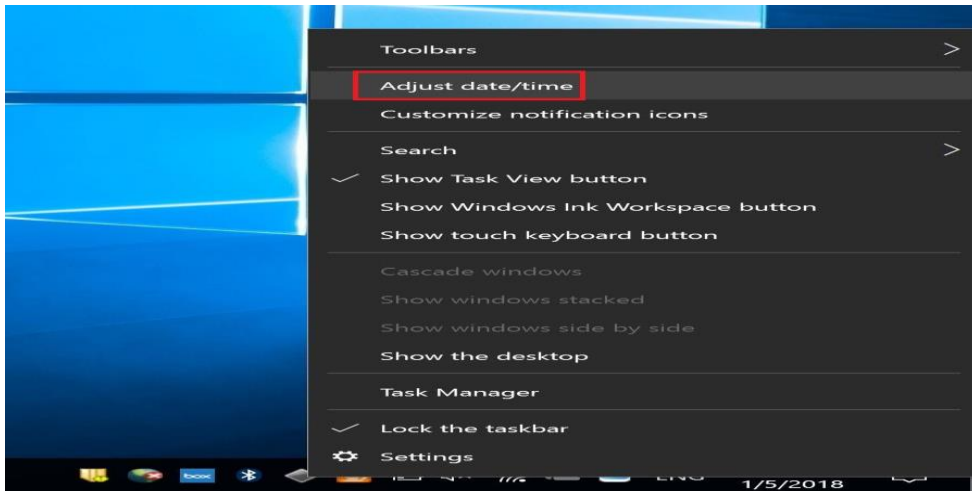
Figure 2. 4 changing date and time

2. A window will open. On the left side of the window select the Date & time tab. Then, under "Change date and time" click Change
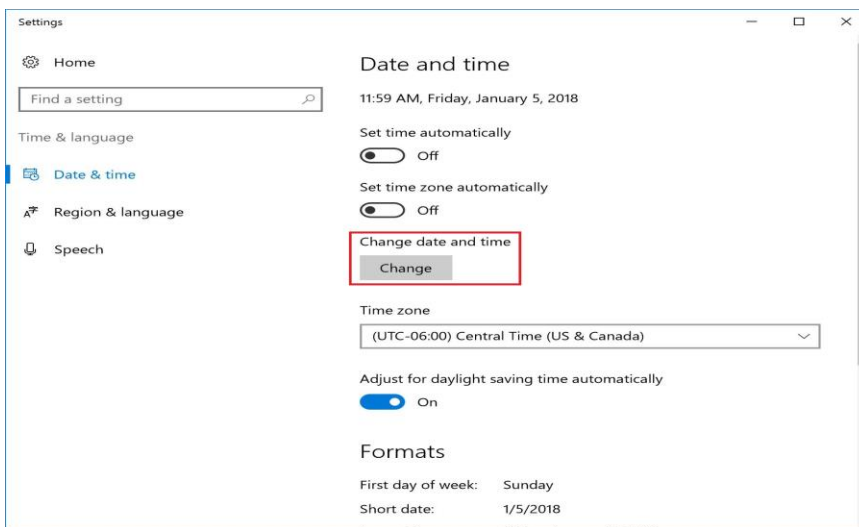
Note: Both Set time automatically and Set time zone automatically must be Off to make this change.

3. Enter the time and press Change
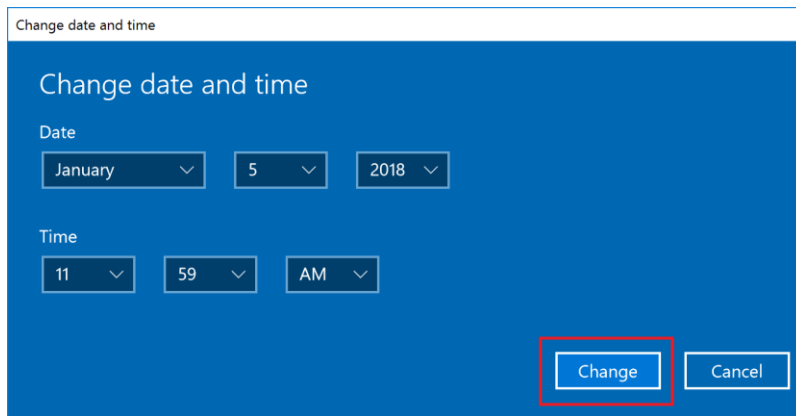
4. The system time has been updated.

6. System Information

You can access this utility by doing a search for System Information in the Start menu or by using Run command, entering msinfo32 and pressing Enter. This utility provides well detailed information about software and hardware on a system in an easy to use and friendly graphical user interface.
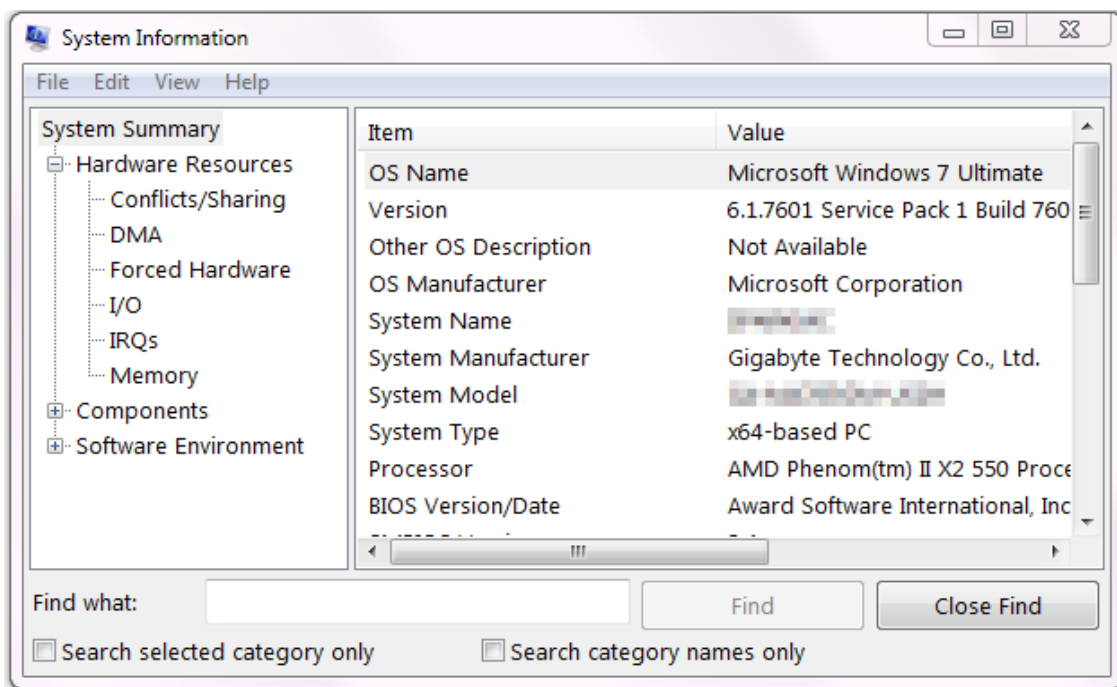
Figure 2. 5 System Information

2.3 Use On-line help

2.3.1 Search online help

Windows 10 includes a Get Help application that can provide solutions to many problems. You'll find it in your Start menu. Click the Start button, type "Get Help," and click the "Get Help" shortcut that appears or press Enter. You can also scroll through the list of applications at the left side of the Start menu and click the "Get Help" shortcut.
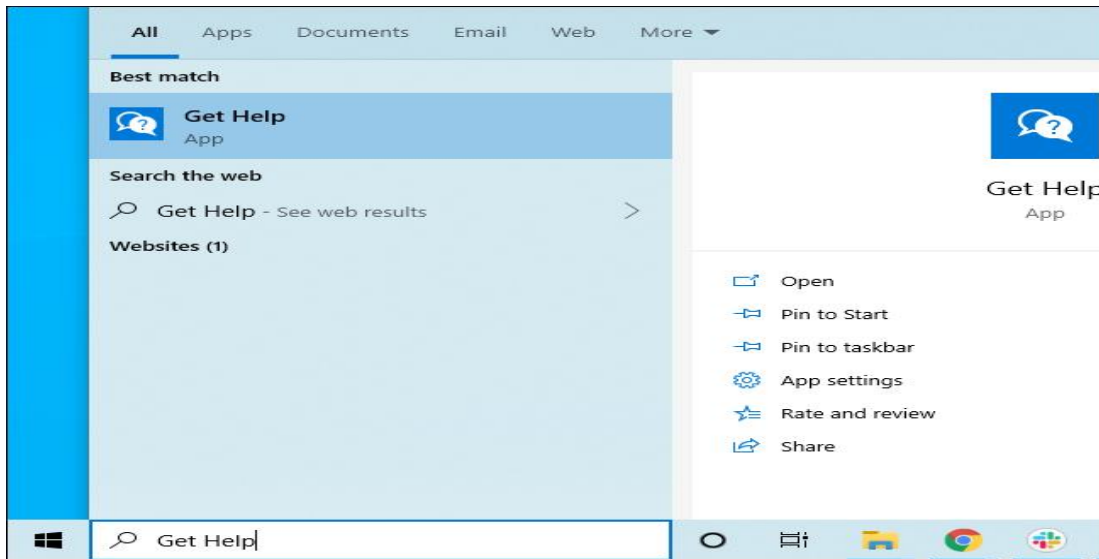
Figure 2. 6 Help and Support in Windows 10

To go back to get help home screen, click on the back button at the top left-hand side of the window.
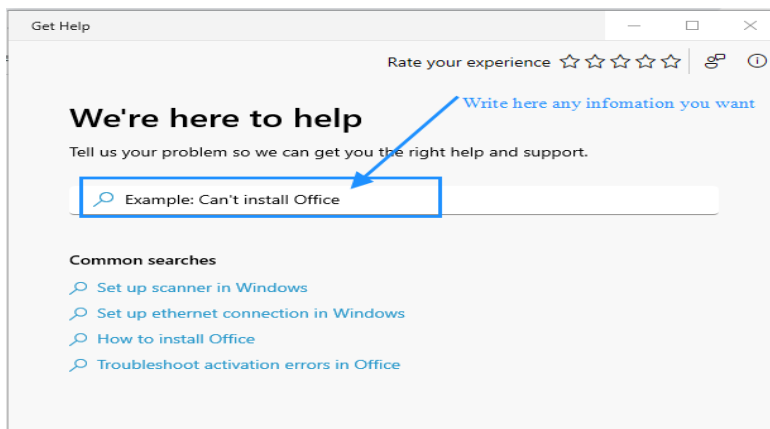
Figure 2. 7 Help and Support Windows final

Self-Check -2
Directions: Answer all the questions listed below.

Test-I. choose the best answer for the given alternatives.

1. ___ is a small picture that may appear on your desktop.

    A. Scroll bar   C. Task bar   E. Minimize:

    B. Title bar   D. Icons

2. This is a bar that appears at the top of the window

    A. Scroll bar   C. Task bar   E. Minimize

    B. Title bar   D. Icons

3. This option shrinks the window to its smallest size.

    A. Scroll bar: C. Task bar   E. Minimize

    B. Title bar   D. Icons

4. This is a slider on the right-hand side of the window that allows you to move down the contents of the window

    A. Horizontal Scroll bar   C. Task bar   E. Minimize

    B. Title bar   D. Vertical Scroll bar

5. The _____is a horizontal bar at the very bottom of the desktop. It shows any applications or windows that are open.

    A. Scroll bar: C. Task bar   E. Minimize

    B. Title bar   D. Icons

6. The _____ enables you to view and change settings

    A. Date and time   C. Folder options

    B. Printers   D. Control Panel

7. One is deferent from others

    A. Themes   D. Appearance

    B. Desktop   E. Fax

    C. Screen Saver

Test II. Answer all the questions listed below

1. _____ is a facility provided with most application programs and operating systems.

2. Write the procedure to search printer installation.

Operation sheet 2.1 Navigating operating system

- **Operation title: Navigate OS**

- **Purpose:** To practice and demonstrate the knowledge and skill required in navigating operating system and customizing computer

- **Instruction:** Use the given step below appropriately. For this operation you have given 20 minutes and you are expected to provide the answer.

- **Tools and requirement:** Computer, divider, power cable

- **Precautions:** before starting computer identify and plunge the correct peripheral

  Procedures 1

Step 1   Left-click on Start on Task bar.

Step 2   Left-click on Control Panel.

Step 3   Double left-click on the Display icon.

  Procedures 2

Step 1   Select 'Windows style' from the Windows and Buttons option.

Step 2   Select a Colour scheme in the same way you changed the Windows and Buttons option.

Step 3   Now change the font size, for example, try 'Large'.

Step 4   Click on OK to save the changes you have made OR click on Cancel if you don't want to save the changes.

  Procedures 3

Step 1   Click on the Time Zone tab.

Step 2   Select 'Aus Eastern Standard Time' from the drop-down menu.

Step 3   Click on the Date & Time tab.

Step 4   Click on the drop-down menu and select the correct month.

Step 5   Use the up and down arrows to select the year.

Step 6   Click on the date in the calendar to select the day.

Step 7   Under the clock, use the up and down arrows to select the correct time.

Step 8   Click on OK to save the changes you made OR click on Cancel if you don't want to save the changes.

- **Quality Criteria:** the given desktop customization and setting given setup

LAP Test 1:

Task 1: Change display settings

- **Desktop**

  Change the desktop pattern to "Ripple"

- **Screen saver**

  Change the screen saver setting to "Marquee".

  Select the slowest speed

- **Text style (Settings)**

  Change the Font to "Courier".

  Set the font size to 48

  Set the font color to Aqua

Task 3: Copy your computer Basic system information

Task 4: Access online help and application software.

- Show how to get windows online help
- Show to get application online help

  - MS Word

UNIT THREE: NAVIGATE AND MANIPULATE DESKTOP ENVIRONMENT

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics: -

- Creating and customizing Desktop icons
- Selecting, opening and closing Desktop icons to access application programs
- Manipulating and returning Application windows to original conditions

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to: -

- Create and customize desktop icons
- Select desktop icons
- Conform open and close to access application programs
- Manipulate windows application and returned to original conditions

3.1. Create and customize desktop icons

3.1.1 Desktop windows

The desktop is the background screen that appears as soon as the computer has finished starting up. The desktop is part of the operating system software, so its appearance is controlled by system settings.

There are several useful items on the desktop including:

i. Basic desktop icons

The Desktop is where you'll find icons (small pictures) for many of your most frequently used programs. You'll most likely see icons for This PC, Network, Recycle Bin.

1. **Computer:** - Allows you to see what drives are attached to your computer (for example, your local hard disk drive, your CD/DVD drives, any networked shared drives, and external drives, such as a USB flash drive).

2. **Documents: -** Supplies a 'catch-all' place for your personal files. Within here you can see your files, any shared files from other computer users and any music or pictures you may have stored.

3. **Recycle Bin: -** Stores any files you delete until you empty it.

ii. The Desktop components

The desktop consists of many main components

1. Desktop that contains many components like icons "file, folder, shortcut. Etc…)
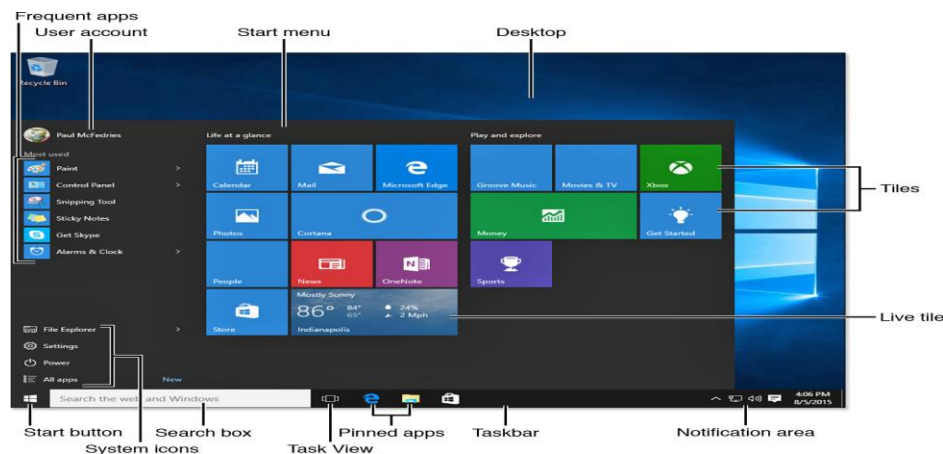
2. Task Bars

Figure 3. 1 Desktop Components

Icons: An icon is a graphic image, a small picture or object that represents a file, program, web page, or command. Icons help you execute commands, open programs or documents quickly. To execute a command by using an icon, click or double-click on the icon. It is also useful to

recognize quickly an object in a browser list. For example, all documents using the same extension have the same icon.

We can classify icons as the following

Figure 3. 2 Different Icons

What is the difference between a file, a folder, and a shortcut?

files store data, on the other hand, is a collection of data. stored in one unit, identified by a filename. They can be documents, programs, libraries, and other compilations of data. File name consists of two-part name and extension. while folders store files and other folders. The folders, often referred to as directories, are used to organize files on your computer.

A shortcut is a link that points to a program on the computer. Shortcuts allow users to create links to their programs in any folder, Start bar, Taskbar, Desktop or other locations on their computer. A shortcut in Windows is commonly identified by a small arrow in the bottom corner of the icon

3.1.2 The task bars

The Task bar is a horizontal bar at the very bottom of the desktop. It shows any applications or windows that are open.

3.1.3 The Start menu

The Start menu where you can access system information and change display settings (in the Control Panel), and open the application programs. You can left-click the Start button on the Task bar to see the Start menu. This menu allows you to:

- access information about the computer system you are using
- access controls for changing the way that information is displayed
- access application programs that are installed on the computer.

Next, we'll look at the settings you can access in the Control Panel. The Control Panel can be selected in the Start menu.
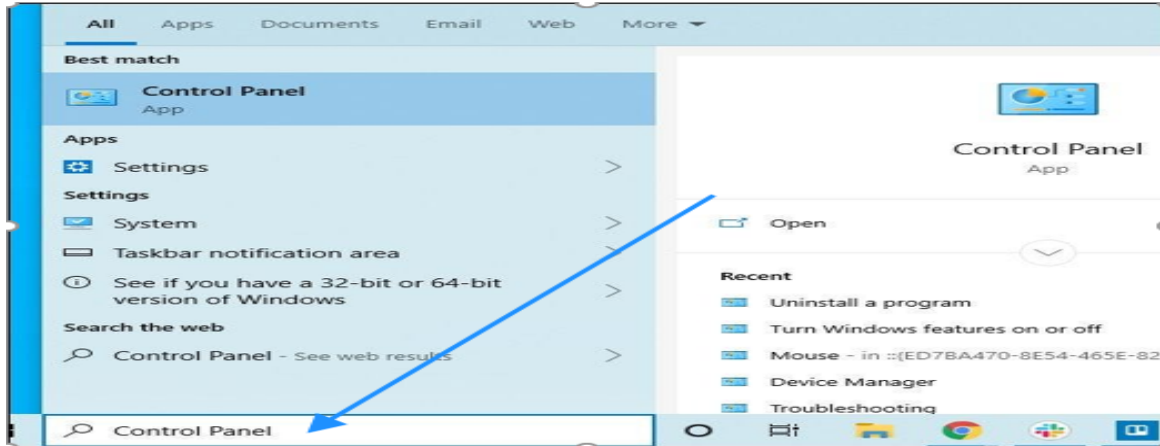
Figure 3. 3 The Start menu

3.2 Select and open desktop icons

3.2.1 Change Your Desktop Icons

Icons like This PC, Network, Recycle Bin, and your user folder are all considered "desktop icons," even though modern versions of Windows don't show them all on the desktop.

In Windows 10, you can access this window through Settings → Personalization →Themes →Desktop Icon Settings. Use the checkboxes in the "Desktop icons" section to select which icons you want on your desktop. To change an icon, select the icon you want to change and then click the "Change Icon" button.
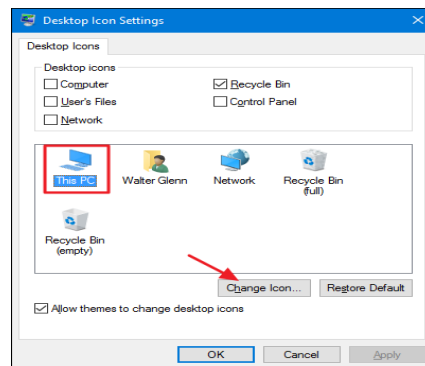
Figure 3. 4 Desktop Icon Settings

3.2.2 Change folder icons

Changing the icon for a folder is not only a good way to pretty things up, but also to call attention to important items. To change a folder icon, right-click the folder you want to change and then choose "Properties."
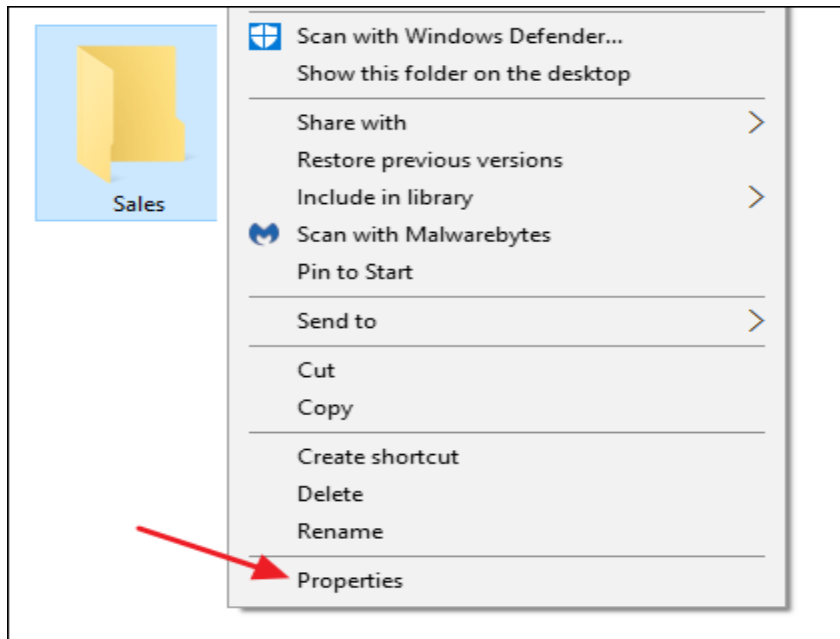
Figure 3. 5 Folder Properties

In the folder's properties window, switch to the "Customize" tab and then click the "Change Icon" button.
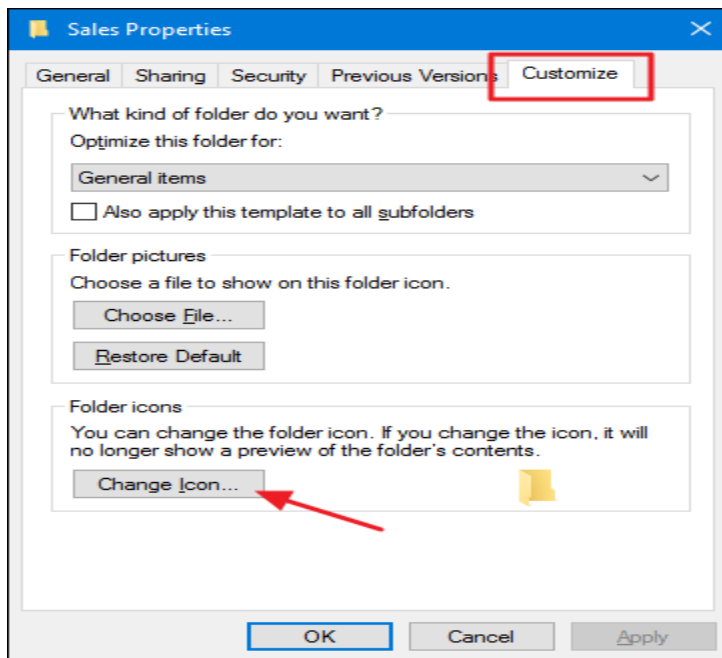
Figure 3. 6 Folder Property

In the "Change Icon" window, you can select any icon you want from the built-in Windows icons, or you can Click "Browse" to locate your own icons.
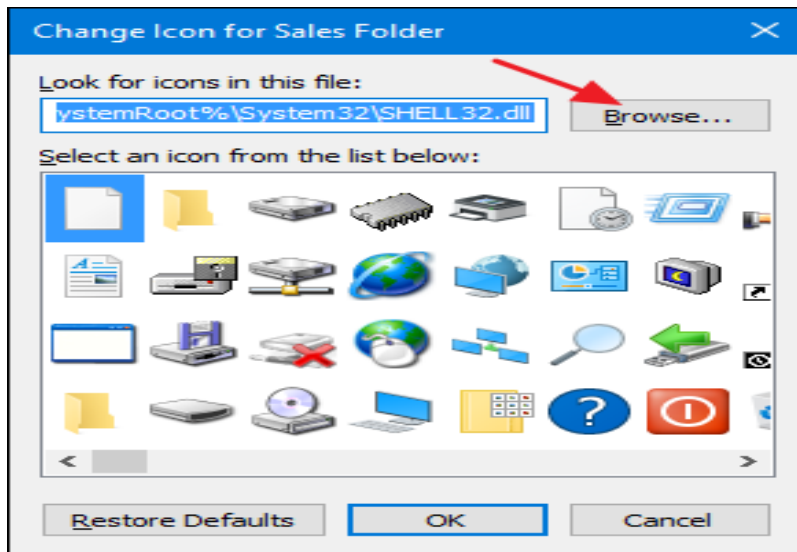
Figure 3. 7 Change icon for folder

If you browse for your own icon file, you can select any EXE, DLL, or ICO file. After selecting the file, the "Change Icon" window will show the icons contained in the file you selected. Click the one you want and then click "OK." Here, we're changing the icon for this folder to a red one to make it stand out more. And back in the properties window, click "OK."
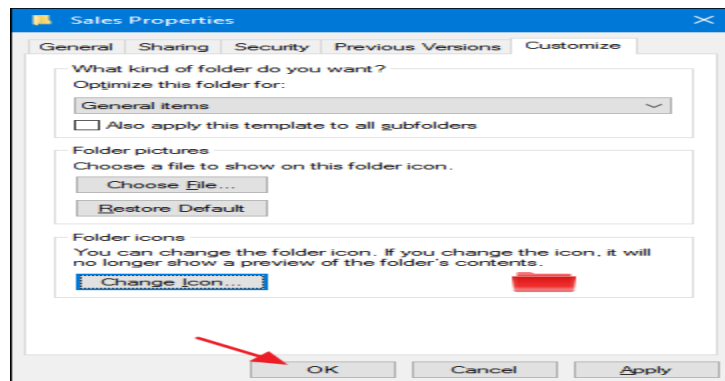
Figure 3. 8 Change icon for folder

3.3 Manipulate windows application

3.3.1 Open and close an application program

Follow these steps to see what programs are installed on your computer and to open one of the programs.

1. In the Start menu, click on All Programs to see a list of all the application programs on the computer.

2. Move the mouse across to the list of programs and then up or down the list to the program you want to use. Click on the name of the program to open it.

3. Note that if a name has a small arrow next to it, a sub-menu appears when you click on the name.

4. If your computer has Microsoft Office listed under All Programs, click on Microsoft Office. Then move the mouse across to the sub-menu and click on Microsoft Office Word.

5. The program will take a few moments to open. A new blank document will be displayed in the Microsoft Word window.

Self-Check 3

Directions: Answer all the questions listed below.

Test 1 Match Column "A" with Column "B".

Column A   **Column B**
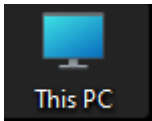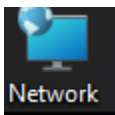
 1. Icons   A. Icon for a getting driver file

 2.   This PC   B. Icon for Computer Networks

 3.   Network   C. Icon for a getting computer setting

 4.   Recycle Bin   D. Shortcuts are displayed in the desktop as

 5.   Control Panel   E. Icon for getting deleted file

Operation Sheet 3.1 Creating and customizing desktop icons

- **Operation title:** Customize desk top

- **Purpose:** To create and customize desktop icons

- **Instruction:** Use the given step below appropriately. For this operation you have given 20 minutes and you are expected to provide the answer.

- **Tools and requirement:**   computer, Driver and power cable

- **Precautions:** before starting computer create and customize desktop icons

- **Procedures 1**

   Step 1   Click and drag an item from a menu.

   Step 2   Use the Create shortcut command in a window's File menu.

   Procedures 2

   Step 1   Click on Start on the Task Bar.

   Step 2   Click on All Programs.

   Step 3   Under All Programs, click on Accessories.

   Step 4   Under Accessories, click on Paint and drag this item to the desktop. (If you don't have Paint on your computer then select a different program.)

   Step 5   You should now have an icon/shortcut to the program on your desktop.

   Procedures3

   Step 1   Double-click on computer (on the desktop).

   Step 2   Double-click on one of the drives listed under Hard Disk Drives. You will now see a list or group of folders that are stored on that drive.

   Step 3   Click once on one of the folders stored on the drive. The name of the folder will now be highlighted (which means it is selected).

   Step 4   Click on the File menu at the top of the window and move down the menu and click on

   Step 5   A new folder called 'Shortcut to… (the name of the folder)' appears in the window. Click and drag this shortcut item to the desktop.

   Step 6   The following icon will now be on your desktop (but with a different folder name):

- **Quality Criteria:** the given customizing creating and modifying properad setting acceptable

LAP Test 3

Task 1   Customize desk top

Task 2   Create a desktop icon to open a program

Task 3   Create a desktop icon to open a folder

Task 4   Change screen sever.

UNIT FOUR: ORGANIZE BASIC FOLDER STRUCTURE AND FILES

This learning unit is developed to provide the trainees the necessary information regarding the following content coverage and topics:

- Creating and naming Directories and subdirectories
- Identifying Attributes of directories
- Moving Subdirectories between directories
- Renaming Directories
- Accessing Directories and subdirectories

This unit will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Create and name Directories and subdirectories
- Identify Attributes of directories
- Move Subdirectories between directories
- Rename directories
- Access directories and subdirectories

4.1 Creating and Naming Directories and subdirectories

4.1.1 Introduction to creating create and naming directories

Data files such as word documents can be kept on a computer for future uses such as editing and printing. To find documents you will need to store them in an organised fashion in the same way you might file documents like lesson notes, bills, letters and bank statements at home. Just as you might use folders to organise your personal or business documents, you also store your computer documents in folders. A folder is only a device for grouping files in the same location, not a data file. Folders and files can be stored on a computer's desktop or on a storage device which will be able to store hundreds or thousands of documents.

Folders can be created or moved so that they sit within another folder, and so on. Other terms for describing this structure of files and folders grouped within folders are directory and sub-directory.

You will need to decide where you want to save files. There are several types of storage devices that may be an option for you, depending on your computer setup.

4.1.2 Storage devices

Hard disk drive (HDD)

Your computer will have a hard disk drive. The hard disk drive is in the system unit. The hard drive is where the operating system and application programs are kept. If you are using a Microsoft Windows operating system, there is also a location called My Documents on the hard drive for storing your data files. You can also have a removable hard disk drive which has the advantage of being able to store a large amount of data and be transported and connected to other computers.

Memory stick/flash drive/thumb drive/pen drive/USB drive

All these terms refer to a small drive that you plug into a USB port (an input connection on the system unit). They are small (about the size of a disposable lighter) and can be carried easily. They hold more data than a floppy disk.

- **CDs** (compact disk)
- **CD-R:** (compact disk read-only) are read-only format which means you can read the data but you can't write (add) data to the CD. They often have application programs or music stored on them.

- **CD-RW:** (compact disk read-write) another forms of CD that you can read and write to. This means you can add or copy data to this type of CD. You will need a CD burner to do this.

4.1.3 Arranging icons

- The icons on the desktop can be arranged so it is easy to find them. This is a good way to group programs together that you use a lot.
- The long way to do this is to drag each icon with the mouse to a place on the desktop. A quicker way to arrange icons is to let the computer do it for you.

Arranging icons on the desktop

Follow these steps to arrange the icons on the desktop:

1. Go to the desktop.
2. Right click an empty space on the desktop. A shortcut menu will appear.
3. Select Arrange Icons from the shortcut menu.
4.   Click on by Name.
5. The icons will arrange themselves neatly in alphabetical (A-Z) order. You can also arrange them by type, size or date.

Icons such as Computer, documents, network and the Recycle Bin never change their position when you choose this command. You can only move them around by dragging them with the mouse.

4.1.4 Using desktop shortcuts

Some of the icons are automatically placed on the desktop when Windows is installed. You can also create shortcuts. Shortcuts are icons that represent files, folders or programs. They are really only a link to the real file or program. In other words, they are like a nickname that stands for a person's real name. All shortcuts have a little arrow in the lower-left corner of the icon. This indicates that the icon is a shortcut. Any file, folder or program on your computer can be a shortcut. They do not use up much room on your hard disk. It is a good idea only to make useful shortcuts. They should be used for the files or programs that you regularly use.

Drive contains three folders under Documents:

1. Customers
2. Staff
3. Warehouse.

The Customers folder has four sub-folders:

1. CD Basement
2. Gig Shop
3. MP3 to go
4. Music Beat.

You can set up your own directory and sub-directories by creating new folders within a hierarchical structure, depending on a logical or business system for organising the directory.

In our earlier example (Figures 1 and 2) the directory on the floppy disk has this hierarchical structure:
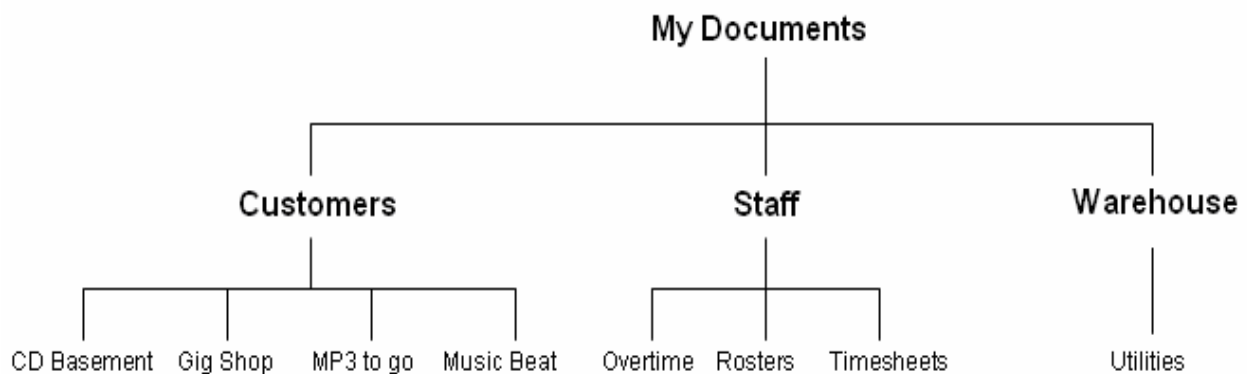
Figure 4. 1 Creating folder structure

4.1.5 Creating a new folder:

To create more folders at the same level as this, keep selecting New Folder until you have all the folders you need. To create one or more folders inside one of the new folders, repeat the above steps.

In this way you can create a hierarchy of folders according to a hierarchical structure. The new directory will be set up and ready to save or copy any documents into. In other ways You can create folders from:

- the desktop (right click the mouse, choose new, then folder)
- My Documents or
- Microsoft Word

In My Documents the main heading is called a directory. The sub-folders are called sub-directories.

Follow these steps to create a new folder:

Step 1 Open Documents

Step 2 Click on File in the top toolbar

Step 3 down to New on the menu

Step 4 Click on Folder from the sub-menu

Step 5 Give the folder a name

4.2 Attributes of Directories

Sometimes you will need to check the attributes of a file or folder to ensure you use it appropriately. Or you may wish to set attributes to read-only so that data is not lost or changed by someone.

Attributes define the type of file or directory which could be:

- read-only
- hidden
- archive
- system

4.2.1 To check or change the attributes of a file

1. Double-click on This PC on the desktop.
2. Double-click on a data drive and find a document file.
3. Right-click on the file you want to check.
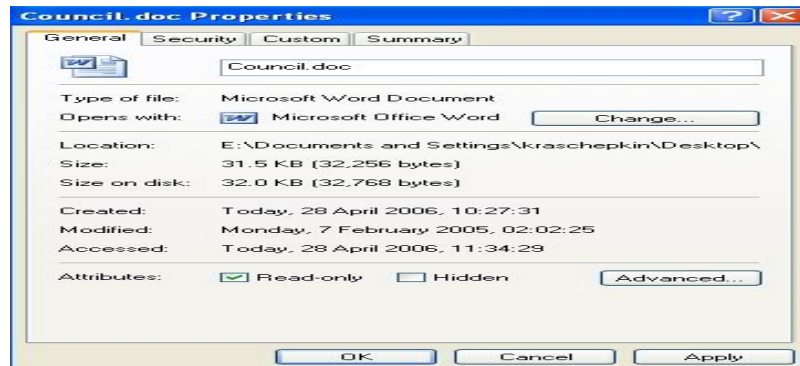4. Select Properties from the menu.

Figure 4. 2 The Properties box for this file shows that the file is Read-only

Under the General tab of the Properties box, you can check or uncheck the boxes for read-only or hidden. More attributes are under the Advanced button.

Click OK to save any change to the attributes and close the Properties box.

Folder views

There are many different ways you can display your electronic `filing cabinet' to view your files and folders. Some people prefer to see their folders and files listed while others prefer to have them displayed as icons.

Changing the folder view

Follow these steps to change the folder view.

1. Open Windows Explorer
2. Select View from the toolbar
3. Select how you want your files and folders displayed, e.g. Details

You can display files or folders as:

Icon's view shows each folder and file as a large icon with its name underneath. If you have a lot of folders and files it is difficult to see them all at one time in this view because the large icons take up a lot of space.

List view is where the files and folders are arranged in columns. You need to use the bottom scroll bar or left and right Arrow keys to see all of them.

Detail's view presents the file system as a list with details about the files and folders. These details

include the name of file in alphabetical order (A-Z), the size of file, the type of file (i.e. Word document, spreadsheet, graphic document) and date and time when it was modified, that is, created and/or changed.

Changing the view of all folders

The view options you select only apply to the open folder. If you want to change the view of all folders, you must use the Folder Options dialog box.

Follow these steps to change the display of all folders and files in the same way:

1. Open Documents
2. Click on Tools on the top toolbar
3. Click on Folder Options. A dialog box will appear like the one below
4. Select View
5. Select the settings you want
6. Click on "Apply to all Folders"
7. Click on OK

Folder properties

A folder's 'properties' refers to information about:

- its type
- its location
- its size
- the number of files and other folders it contains
- when it was created

Information about the size of a folder is useful if you need to save the folder on to a floppy disk and want to know if it will fit.

4.3 Renaming Directories

4.3.1 Renaming folders

You will notice that there is a '+' (plus) or '-' (minus) sign next to the main folders or directories. The `+' sign indicates there are sub-folders (sub-directories) within this folder. When the folder has a minus sign beside it, it means that all the sub-folders within the folder are on view.

You can rename a folder in the same way that you rename a file.

Follow these steps to rename a folder:

1. Open Documents

2. Find the folder you want to rename and right click on it

3. Select Rename from the shortcut menu that appears

4. Type the new name on top of the old name. As you type, the old name will

4.3.2 Deleting folders

The steps for deleting a folder are the same as for renaming a folder but you select Delete

rather than Rename from the shortcut menu above.

Follow these steps to delete a folder:

1. Open Documents

2. Find the folder you want to delete and right click on it

3. Select Delete from the shortcut menu that appears.

4.4 Move subdirectories between directories

Sometimes it is necessary to move a folder to another location or folder. Here are two ways you

can do this. (Note that you can move a file in the same ways.)

4.4.1 Use 'Move to Folder'

1. In window view, click once on the folder you want to move (so that it is selected).

2. In the window's Toolbar click on the Edit menu and select Move to Folder.

3. Select the folder you want to move the selected folder to. To do this, scroll up or down the

   list to find the target folder. You may also need to expand folders to find the folder you want.

   To select the target folder, click on the folder name so that it is highlighted.

4. Click on the Move button.

4.4.2 Drag the folder to the new location

Another way to move a folder is to drag the folder to the new location:

- Click on the folder icon and keep the mouse button down as you drag the folder over the

  top of the target folder. Release the mouse button when the target folder is highlighted.

  OR

- Click-drag the folder into the window area of an open folder or drive window.

4.5 Accessing Directories and subdirectories

4.5.1 Access directories on your computer

You can view folders on a drive and the contents of the folders through windows. Double-clicking on a drive icon or a folder icon opens a window which shows you its contents.
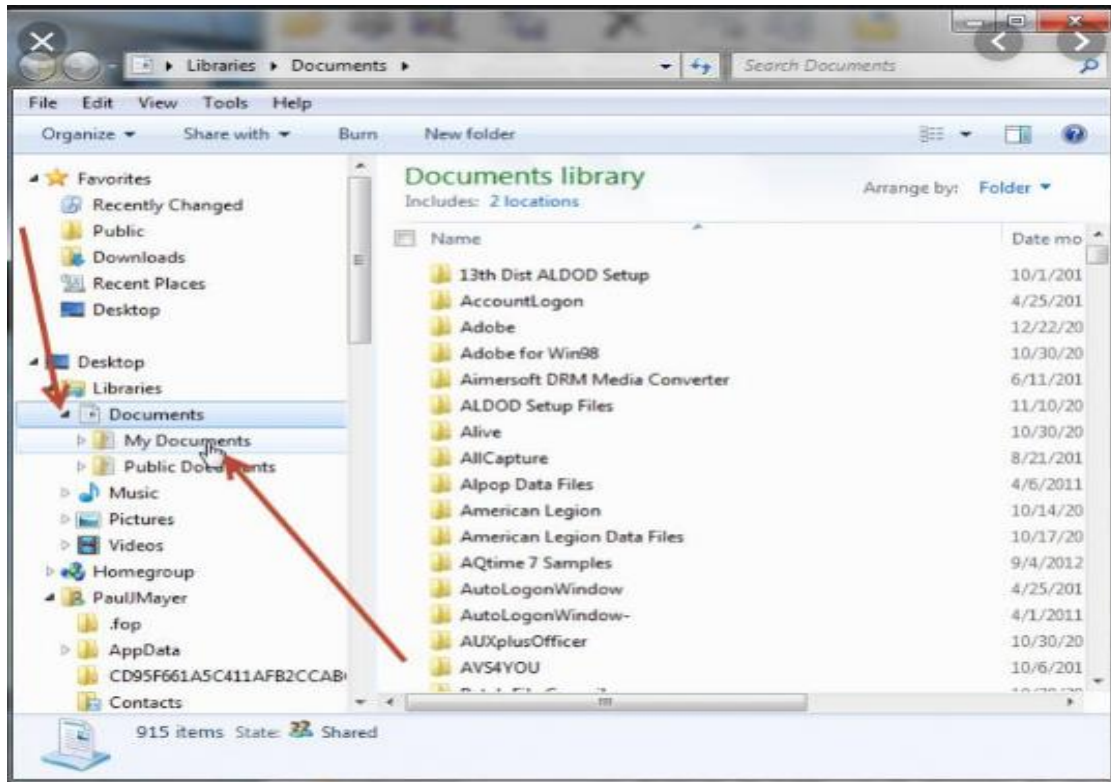

Figure 4. 3 selecting Folders and sub folders from the left and right panel

Self-check - 4

Test 1 **choose**

Directions: Answer all the questions listed below.

1. _____ are the structure of files and folders grouped within folders.

    A. Directories

    B. Folder

    C. Files and folders

    D. All

2. _____ is a device for grouping files in the same location, not a data file.

    A. Directories

    B. Folder

    C. Files and folders

    D. All

3. _____ can be enclosed by any number of folders which creates a hierarchy or tree structure.

    A. Directories

    B. Folder

    C. Files and folders

    D. All

4. All refers to a drive that you plug into USB port **except** for one.

    A. flash drive   C. Pen drive

    B. CD drive   D. Hard drive

5. The type of CD that has read-only format which means you can read the data but you can't write (Add) data to the CD.

    A. CD-RW   C. CD-W

    B. CD-WR   D. CD-R

Test 2 Give short answer

1   Which way do you find easier to view the folders and files? Why?

2   Right click on a folder in Documents and select Properties.

     List at least three bits of information that comes up?

3   Why is there a `+' (plus) symbol next to some folders?

Operation Sheet 4.1 creating folder and arrange folder

- **Operation title:** create folder and arrange folder

- **Purpose:** To creating and arranging folders and sub folders are used to measuring technical aspects of the unit

- **Instruction:** Use the given step below appropriately. For this operation you have given 20 minutes and you are expected to provide the answer.

- **Tools and requirement:**

    4.   Computer

    5.   Divider

    6.   Computer power cable

- **Precautions:** before starting computer identify and plunge the correct peripheral

- **Procedures in doing the task**

Step 1: Follow these steps to arrange the icons on the desktop:

    1.   Go to the desktop.

    2.   Right click an empty space on the desktop. A shortcut menu will appear.

    3.   Select Arrange Icons from the shortcut menu.

    4.   Click on by Name**.**

    5.   The icons will arrange themselves neatly in alphabetical (A-Z) order. You can also arrange them by type, size or date.

Step 2: Follow these steps to create a new folder:

    1.   Open Documents

    2.   Click on File in the top toolbar

    3.   Scroll down to New on the menu

    4.   Click on Folder from the sub-menu

    5.   Give the folder a name

Operation Sheet 4.2 Renaming Directories and sub directories

- **Operation title:** Renaming Directories

- **Purpose:** changing names of the folder as you want

- **Tools and requirement:**

  1. Computer

  2. Divider

  3. Computer power cable

- **Precautions:** Before renaming folders or directories check your computer plunge the correct peripherals.

- **Procedures in doing the task**

  Step 1: Follow these steps to delete a folder:

  1. Open Documents

  2. Find the folder you want to delete and right click on it

  3. Select Delete from the shortcut menu that appears

  Step 2: Rename directories

  You can rename your folders at any time. To do this:

  1. Right-click on a folder.

  2. Left-click on Rename in the menu.

  3. Type in the new folder name.

  4. Press Enter on the keyboard to save the change.

Operation Sheet 4.3 Moving directories or folders

- **Operation title:** Move directories or folders

- **Purpose:** Move folders or directories on place to the other place.

- **Tools and requirement:**

    4. Computer

    5. Divider

    6. Computer power cable

- **Precautions:** Before renaming folders or directories check your computer plunge the correct peripherals.

- **Procedures in doing the task**

  Step 1: Follow these steps to move a folder

    1. Open Documents

    2. Right click on the folder you want to move

    3. Click on Cut in the shortcut menu that appears

    4. Right click on an empty space in the new folder

    5. Click on Paste from the shortcut menu that appears. The moved folder then becomes a sub-folder of the new folder

  Step 2: Follow these steps to drag a file to a new folder:

    1. Go to My Documents

    2. Find the correct folder and click on it to open it

    3. Find the file you want and click on it

    4. Attach the mouse pointer to the file

    5. Use the left mouse button to drag and drop the file into the new folder

Lap test – 4

Test 1

1. Create the following three directories in a folder called 'Documents':

   - Customers

   - Staff

   - Warehouse

2. Create the following four sub-directories within the Customers sub-directory:

   - CD Basement

   - Gig Shop

   - MP3 to go

   - Music Beat

3. Create the following three sub-directories within the Staff sub directory:

   - Overtime

   - Rosters

   - Timesheets

4. Create one sub-directory within the Warehouse sub-directory.

   - Utilities

Test 2

1. Move files and folders or directories one place to another.

UNIT FIVE: ORGANIZE FILES FOR USER AND/OR ORGANIZATION REQUIREMENTS

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics: -

- Using system browser to search derives
- Accessing Most common types of files in the directories
- Moving Files between directories
- Copying Files to disks
- Restoring Deleted files
- Erasing and formatting Disks

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to: -

- Use system browser to search derives
- Access most common types of files in the directories
- Move files between directories
- Copy Files to disks
- Restore Deleted files
- Eras and format Disks

5.1 Using system browser to search derives

5.1.1 Use the Taskbar Search Bar for a General Search

The search bar permanently located at the bottom of the screen is the go-to search method for most people, and it's effortless to use. Go this route if you have no clue where to find a file or if you need to open an app or email.

1. Press the WIN key, or select the search bar from the bottom-left corner of the taskbar, near the Start button.

2. Start typing the name of the file, app, or another item you're looking for, but don't press Enter just yet.
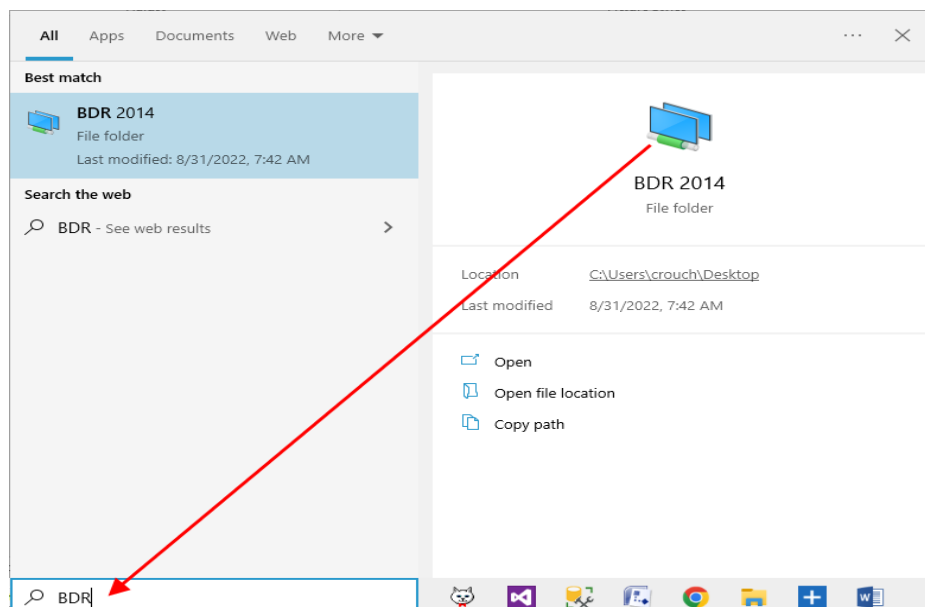

figure 5. 1 windows search

3. Select the item you want to open. You can do this via touch, the mouse, or by highlighting it with the up and down arrow keys and pressing Enter.

5.1.2 Search a different directory

The search will be done on whatever folder is selected in the Look in: field. To search a different directory, click on the arrow next to the Look in: field to get a menu of all the drives you have access to. Scroll down to the very end of this list and select Browse. Then you can search the directory tree to find a specific folder to search. Click on the name of the folder you want to search and then click OK.

5.1.3 Advanced searches

You can do an advanced search to look for files used in the last week or month when searching files and folders in the Search Companion box.

1. Click on More Advanced Options
2. Select the appropriate setting for your search.
3. Click on Search.

5.2 Accessing Most common types of files in the directories

5.2.1 Accessing files Regularly

There may be files that you regularly need to access, for example, to update a database or use a document template.

In Microsoft Windows you can create shortcuts to files so that you can quickly access them under the Favourites menu. To do this:

1. Use any of the above methods to find the file you regularly use.
2. Click on the file name to select it.
3. On the window Toolbar click on the Favourites menu.
4. Click on Add.

You can now access the file from the Favourites menu (on any window's Toolbar) by clicking on Favourites and selecting the file.

5.3 Copying Files to disks

To create a conventional music CD (CD Audio), use Microsoft's Windows Media Player or other software to create your disc. A disc containing MP3 files is not the same as CD Audio and it will not play in older audio players that do not recognize MP3 audio.

1. In Windows, search for and open File Explorer.

2. Click This PC.

3. Right-click the name of the disk drive and select Eject. Remove any discs from the drive that may have ejected at this time.
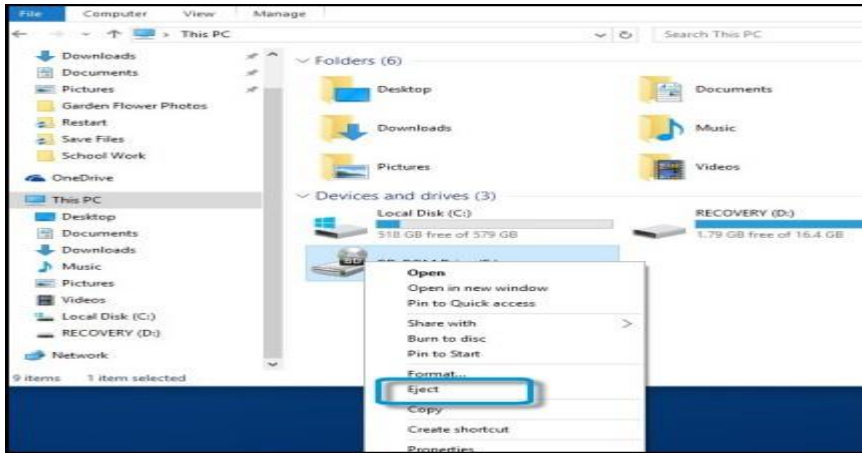
Figure 5. 2 Eject a disc

4. Insert a blank disc into the drive and close the drive. The amount of free space displays below the drive icon and the icon changes to reflect the type of disc that was inserted.
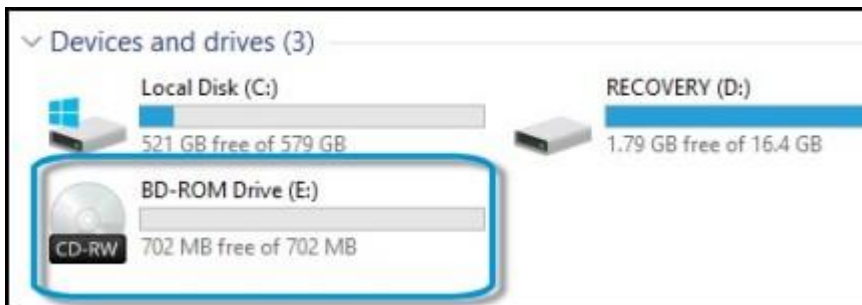

Figure 5. 3 Drive icon showing that a writeable disc has been inserted

5. Double-click the drive icon to open the Burn a Disc window.

6. Type a title for your disc (default is the date), then select Like a USB flash drive or with a CD/DVD player, depending on how you want to use the disc.

Figure 5. 4 Change default date

If you select Like a USB flash drive, the files copy to the disc. You can save, edit, and delete files on the disc many times, but the disc might not work in other computers and devices. To use this option, follow these steps:

    a) Click Next in the Burn a disc window. Drag files to this folder to add them to the disc message displays.

    b) Select the files to be added to the disc, then drag them to the drive icon. For example, if you want to copy your garden flower photos from the Pictures folder, drag the Garden Flowers Photos folder to the drive icon.
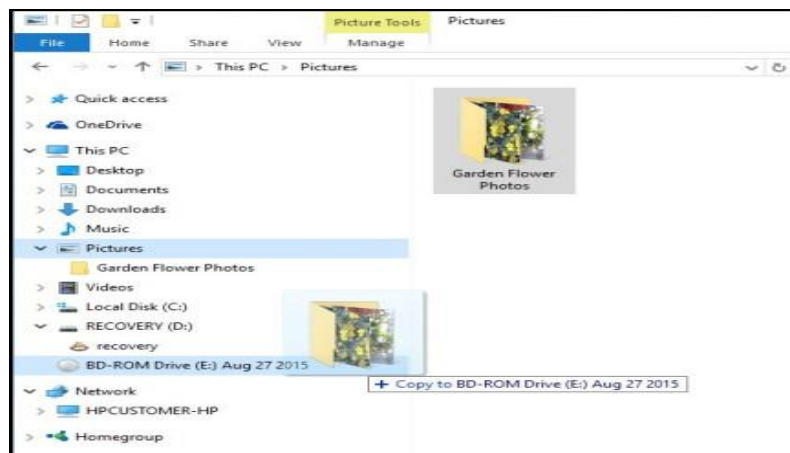

Figure 5. 5 Dragging files to the drive icon

7. If you select with a CD/DVD player, the files are burned to the disc. These files cannot be edited or removed from the disc, but the disc can be used on most computers. To use this option, follow these steps:

- Click Next in the Burn a disc window. The disc formatting process begins.

- A Drag files to this folder to add them to the disc message displays.

- Navigate to the files, select them, then drag them to the drive icon.

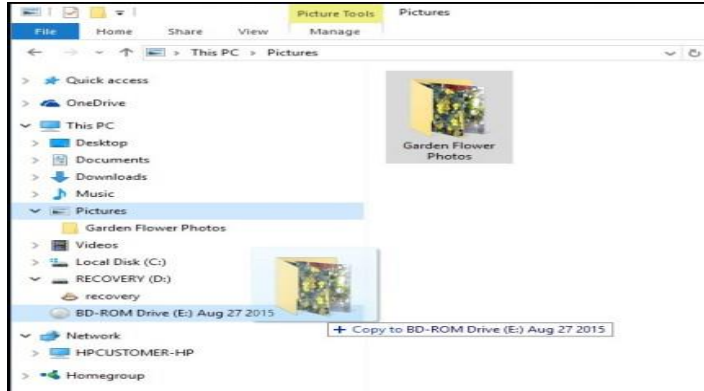Figure 5. 6 Dragging files to the drive icon

The files display in a Files Ready to Be Written to the Disc window.

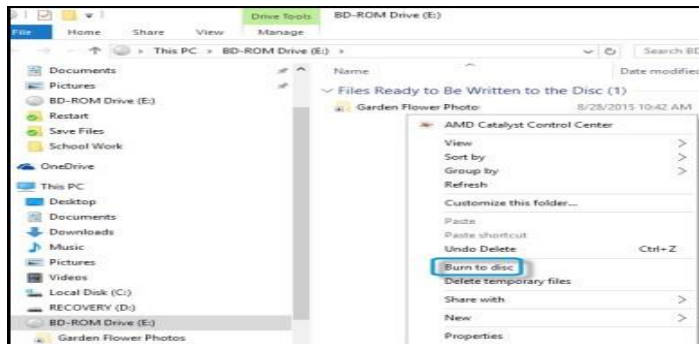- Right-click the empty area, then select Burn to disc.

Figure 5. 7 Selecting Burn to disc

- In the Prepare this disc window, type the disc title (default is the date), select the recording speed, then click Next. Your selected files burn to the disc.

Figure 5. 8 Prepare this disc window

- When the burn process is complete, a You have successfully burned your files to the disc windows opens. Click Finish to close the window.

Changing the disc drive recording properties

Use the following steps to change the disc drive recording properties.

1. Right-click the drive, select Properties, then click the Recording tab to access the following window.
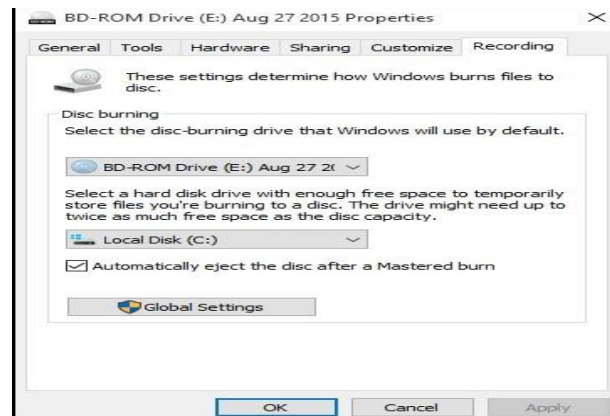

Figure 5. 9 Recording Properties

2. Select Global Settings to choose how the current pdf session closes when a single session or multi session capable disc is ejected.

3. Click OK to save your changes.

5.4 Restoring Deleted files

5.4.1 Delete and restore files

You may need to delete files or folders, for example, when you no longer need them or when they are copied to another disk.

Here are two ways you can delete a file (a folder can be deleted in the same ways).

1. **Right-click on the file you want to delete**
   - Right-click on a file.
   - Left-click on Delete in the menu.

   The file is now moved to the Recycle Bin which sits on the desktop.

2. **Drag the file to the Recycle Bin**

   Another way to delete a file is to drag it to the Recycle Bin on the desktop:

   - Click on the file and hold the mouse button down as you drag it to the Recycle Bin.

- When the file is directly on top of the Recycle Bin the bin will be highlighted. At this point release the mouse button and the file will be moved into the bin.

5.4.2 Restore deleted files

If you have deleted files or folders but not emptied the Recycle Bin you can still get the deleted files back. This is called restoring a file. To do this you need to access the Recycle Bin from the desktop:

1. Double-click on the Recycle Bin to open it. Inside this window you can see the files that have been deleted.

2. Right-click on the file you want to restore.

3. Click on Restore in the menu. The file will be returned to the place it was previously deleted from.

5.4.3 Empty the Recycle Bin

Deleted files and folders stay in the Recycle Bin until you empty the bin. If you empty, the Recycle Bin anything in it will be permanently deleted (unable to be restored from the desktop). It is a good idea to empty the Recycle Bin on a regularly basis, as deleted files take up storage space on the computer.

To empty the Recycle Bin:

1. Right-click on the Recycle Bin icon.

2. Select Empty Recycle Bin from the menu. (If there are no files in the bin then this option will be faded.)

The files that were previously deleted (transferred to the bin) are now permanently deleted.

5.5 Erasing and formatting Disks

You can format a disk if you want to erase the contents of the disk. You might want to do this because you no longer need the data that was stored and you want to reuse the disk. You might also want to format the disk if it has a virus.

To format an external drive in Windows:

1. Plug your drive into the computer and, if necessary, into a wall outlet.
2. Open Windows Explorer, click the "Computer" section in the sidebar, and find your drive.
3. Right-click on the drive and choose "Format."
4. Under "File System," choose the file system you want to use. See the above section for more details on which one to pick.
5. Give your drive a name under "Volume Label," and check the "Quick Format" box.
6. Click "Start" to format the drive. You'll get a notification when it's done (it should only take a few seconds).

When you're done, open up the drive in Windows Explorer and you can begin dragging files to it, or backing up your computer.
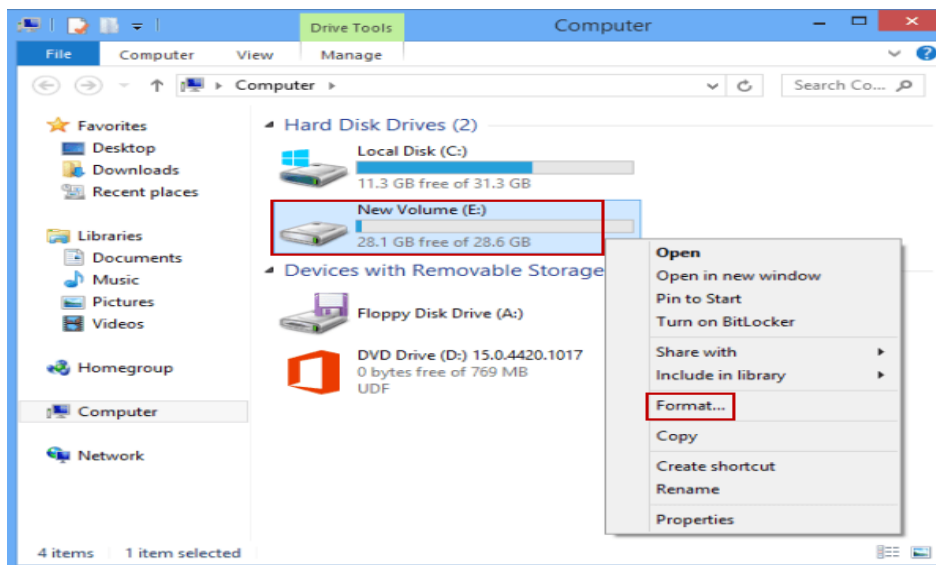

Figure 5. 10 Formatting a disk

5.5.1 Format a hard drive using the command prompt

5.5.1.1   Command Line Interface based Operating Systems

A command line interface (CLI) is a method of talking with a computer by giving lines of text from the keyboard.

 The user types a command-on-command prompt and executes the command by pressing the Enter key. Example: DOS

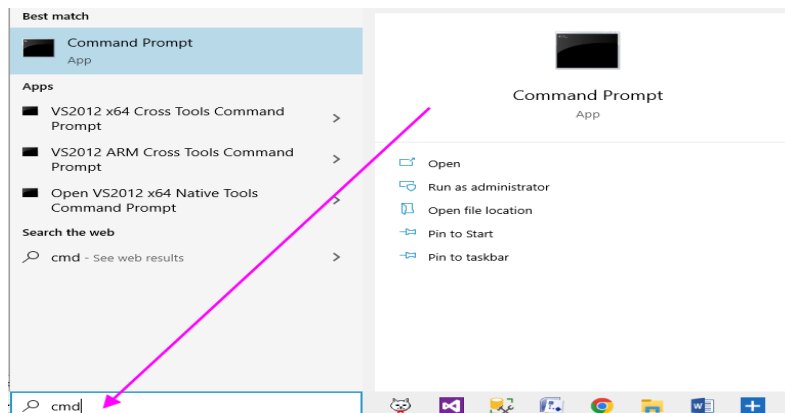Select the "Start" button, type "CMD" then choose "Command Prompt" in the list that appears.

Figure 5. 11 opening command prompt file

DOS File and Directory Naming

Filenames in DOS contain two parts – name and extension. The rules of file and directory naming in DOS are similar to Windows with the following exceptions:

- A file name can be a maximum of 8 characters long.

- Extensions can be a maximum of 3 characters and an extension is optional.

- The following special characters are not allowed in file names: * + = | \ [ ] : ; " < , > ? /.

Basic DOS Commands

The most common DOS commands include dir, md, rd, cd, edit, copy, ren and del.

dir Command: directory command (dir) is used to view the contents of a directory.

<u>Syntax</u>: dir [path]

- **Md Command**: md (make directory) command is used to create directories.

    <u>Syntax</u>: md [path] directory name

    ✓ Path- indicates the place where the new directory will be created.

    ✓ Directory name- indicates the name of the directory to be created.

- **Cd Command:** cd (Change directory) command is used to change directory.

   Syntax: **cd** [path] [\] [..]

  ✓ path – the location of the directory to which the current directory is going to be switched.

  ✓ \ - to move to the top level of the drive (e.g. C:\)

  ✓ .. – to move up one directory.

- **Rd Command:** rd (remove directory) command is used to delete a directory.

   Syntax: **rd** [path] directory name

  ✓ path – the location of the directory to be deleted.

  ✓ Directory name – the name of the directory to be deleted.

  ✓ The rd command is used to delete only empty directories.

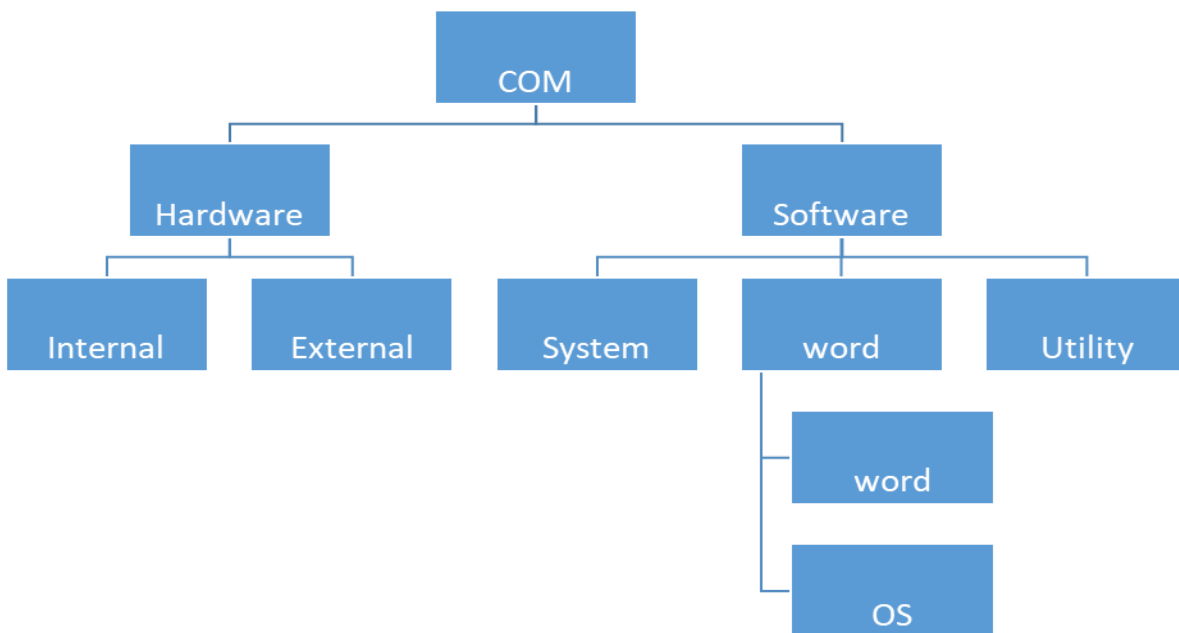Create the command under desktop using command prompt that shows in below.

Figure 5. 12 Directories and subdirectory's structure

Use Disk part

Once command line is open, type '**disk part**' and press Enter.

STEP 1:   Type List Disk

The above command will open a Disk part window. In this window, type '**list disk**' and press Enter. It will list all the available drives.

STEP 2:   Select the Drive to Format

Now type 'select disk (disk number)' as shown above. Specify the drive number which needs to be formatted.

STEP 3:   Clean the Disk

In this step, type 'clean'. This command will permanent delete all files and folders, and successfully clean up the disk.

STEP 4:   Create Partition Primary

To make the drive again accessible, type 'create partition primary'.

STEP 5:   Format the Drive

Now format the drive with FAT or NTFS file system. Type 'format fs=ntfs' and press Enter.

STEP 8:   Assign a Drive Letter

Self-check-5

Test 1 choose

Directions: Answer all the questions listed below.

1. key on the top row of your keyboard. You may need to select the specific folder or drive you want to search on

   A. F3
   B. OS Search
   C. F10
   D. Escape

2. Witch one of the following is advanced search to look for files used in the last week or month when searching files and folders in the Search Companion box.

   A. Click on More Advanced Options
   B. Select the appropriate setting for your search.
   C. Click on Search
   D. All

3. There might be an occasion when you send a file to the Recycle Bin by mistake, not realizing that you might still need that file for some reason.

   A. Cut:
   B. Copy:
   C. Paste
   D. restore

4. Copying the file from given location in to new drive using keyboard is

   A. Ctrl +V
   B. Ctrl +Alt +Shift
   C. Ctrl +C
   D. Ctrl +Alt +Shift + Delete

5. Click and hold down the mouse button on the file you want to copy

   A. Using Keyboard
   B. Windows command prompt
   C. Drag a file
   D. All

Operation sheet 5.1 Searching Files using windows 10

- **Operation title:** search file using windows.

- **Purpose:** the use of searching files in windows is easily get files and documents.

- **Instruction:** For this operation you have given 5 minutes and you are expected to provide the answer.

- **Tools and requirement:** Computer, divider, power cable.

- **Precautions:** you have opened the computer properly.

- **Procedures 1**

  1. Right-click on a folder or drive icon

  2. Right-click on a folder or drive icon and select Search from the menu. This will search on the folder or drive you clicked on, e.g. My documents.

  3. Type in either part or all of the file name OR a word or phrase contained in the document you are searching for.

  4. Click on the Search button

- **Procedures 2**

  1. Click on More Advanced Options

  2. Select the appropriate setting for your search.

  3. Click on Search.

- **Quality Criteria:** After the end of this operation sheet searching files and folders properly.

Operation sheet 5.2 Accessing the most common types of files and folders

- **Operation title.** Access common types of files and folders

- **Purpose:** easily accessing files and folders.

- **Instruction:** For this operation you have given 2 minutes and you are expected to provide the answer.

- **Tools and requirement:** Computer, divider, power cable.

- **Precautions:** you have opened the computer properly.

- **Procedures 1**

  1. Use any of the above methods to find the file you regularly use.
  2. Click on the file name to select it.
  3. On the window Toolbar click on the Favourites menu.
  4. Click on Add.

- **Procedures 2**

Follow these steps if you need to find a file:

  1. Go to the desktop
  2. Click on Start in the bottom-left corner
  3. Click on Find from the sub-menu
  4. Select Files or Folders. A dialog box will appear

- **Quality Criteria:** After the end of this operation sheet searching files and folders properly.

Operation sheet 5.3 coping files or folders

- **Operation title:** copy files

- **Purpose:** easily copping files and folders.

- **Instruction:** For this operation you have given 2 minutes and you are expected to provide the answer.

- **Tools and requirement:** Computer, divider, power cable.

- **Precautions:** you have opened the computer properly.

- **Procedures 1**

    Copy and paste a file

1. Locate the file you want to copy.

2. Right-click on the file. Click on **Copy** in the menu.

3. Right-click in a new location. Click on **Paste** in the menu.

    To empty the Recycle Bin:

3. Right-click on the Recycle Bin icon.

4. Select Empty Recycle Bin from the menu. (If there are no files in the bin then this option will be faded.)

5. **Quality Criteria:** After the end of this operation sheet copying files and folders properly.

Operation sheet 5.4 Cleaning data by using command prompts.

- **Operation title:** clean data using disk part

- **Purpose:** permanently clean data from the drive.

- **Instruction:** For this operation you have given 3 minutes and you are expected to provide the answer.

- **Tools and requirement:** Computer, divider, power cable.

- **Precautions:** you have opened the computer properly.

Procedures 1

To format an external drive in Windows:

1 Plug your drive into the computer and, if necessary, into a wall outlet.

2 Open Windows Explorer, click the "Computer" section in the sidebar, and find your drive.

3 Right-click on the drive and choose "Format."

4 Under "File System," choose the file system you want to use. See the above section for more details on which one to pick.

5 Give your drive a name under "Volume Label," and check the "Quick Format" box.

6 Click "Start" to format the drive. You'll get a notification when it's done (it should only take a few seconds).

Format a hard drive using the command prompt

Step 1: Open Command Prompt as Administrator
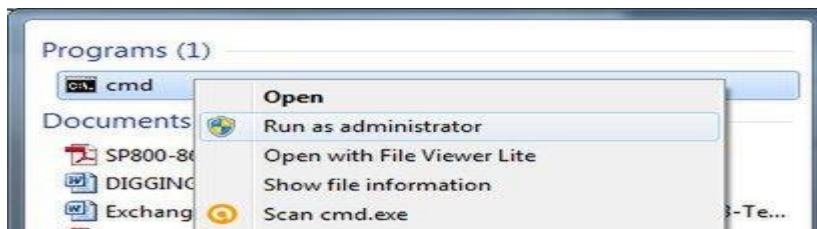
Search for command prompt, right click and run as Administrator.

Step 2: Use Disk part

Once command line is open, type 'disk part' and press Enter.

Step 3: Type List Disk

The above command will open a Disk part window. In this window, type 'list disk' and press Enter. It will list all the available drives.

Step 4: Select the Drive to Format

Now type **'select disk (disk number)'** as shown above. Specify the drive number which needs to be formatted.

Step 5: Clean the Disk

In this step, type 'clean'. This command will permanent delete all files and folders, and successfully clean up the disk.

Step 6: Create Partition Primary

To make the drive again accessible, type **'create partition primary'**.

Step 7: Format the Drive

Now format the drive with FAT or NTFS file system. Type **'format fs=ntfs'** and press Enter.

LAP Test 5

Task 1

1. Search any files as you want.

2. Copy files and folders based on the manual

3. Format the Flash Drive then change the name of Drive to your name.

4. Search a file "Serial Number"

5. Copy the "Serial Number" to the Flash Drive

UNIT SIX: INSTALL PRINTER

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics: -

- Add and install printers
- Change printer to default setting
- Print document

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to: -

- Add and install printer with correct printer settings
- Change default printer if appropriate
- Perform print information

6.1 Add and install printers

6.1.1 Basic printer concepts

A printer is an output device of a computer, it prints the output data and information of a computer on paper, plastic, wood metal or any hard surface depending on what printer one is using. In simple language, a computer printer is an external hardware device responsible for taking computer data and generating a hard copy of that data. Different types of printers print differently, the quality and speed of printing differ from one printer type to another. They are one of the most commonly used peripherals on computers and are commonly used to print text, images, and photos.

A different type of printer has different interfaces or ways of connecting to the computer. The interfaces of include: Ethernet port: Cat5 or Cat6, fire wire port, MPP-1150, parallel port, SCSI, serial port, wireless, Bluetooth or through a USB port. Today the most common way a printer connects to a printer is through a USB port.

6.2 Types of printers

They are different types of computer printers: all-in-one (AIO) printer, dot matrix printer, inkjet printer, laser printer, multifunction printer (MFP), thermal printer, LED printer, etc. Today, the most common printers used with a computer are Inkjet and Laser printers.

Printers are all together divided into two main categories: impact printers or character printers and non-impact printers.

Impact Printer: With this category, hammers or pins strike against a ribbon and paper to print the text. This mechanism is known as electro-mechanical mechanism. The examples of Impact printers are Daisywheel and Dot matrix printers.

Character Printer: It prints only one character at a time. It has relatively slower speed. For instance, the dot matrix printers.

Non-Impact Printer: Use non-Impact technology such as ink-jet or laser technology. There printers provide better quality of operations at higher speeds. Non-impact printers are of two types, the: Inkjet printers and laser printers.

6.3 Installing printer software

The following sections provide instructions for installing the printer software on various operating systems.

To install a printer driver

To install the printer software for Windows NT 4.0, you must use the Add Printer Wizard.

1. Click Start, and then point to Settings.
2. Click Printers.
3. Double-click Add Printer.
4. Select the port that the printer is connected to, and click Next.
5. Click Have Disk. Click Browse.
6. On the CD-ROM, browse to the driver you want to install as follows:
   a. Select your language from the directory list, and double-click.
   b. Select drivers from the directory list, and double-click.
   c. Select your operating system from the directory list, and double-click.
   d. Select the driver from the directory list, and double-click.
   e. Click OK to select the INF file.
   f. Click HP LaserJet 1160 or HP LaserJet 1320 series printer, and click OK to begin the installation.
7. Follow the on-screen instructions to complete the software installation.

To install printer software for all other operating systems

Insert the software CD that came with the printer into the computer CD-ROM drive. Follow the on-screen installation instructions.

Note If the Welcome screen does not open, click Start on the Windows task bar, click Run, type D:\setup (where D is your CD drive letter), and click OK.

Selecting the default printer

Printers that you can access from your computer may be directly connected to your PC or you may have access to printers over a network. A network printer could serve many computers, so you may not be the only person sending jobs to a printer.

Check printers you can access

If printing over a network, there may be more than one printer you can access. To check the printers that you have access to:

1. Click on Start and then select the Control Panel.

2. Double-click on Printers and Faxes to open this item.

3. In Printers and Faxes, you see the names of the computer/s that you should be able to access.
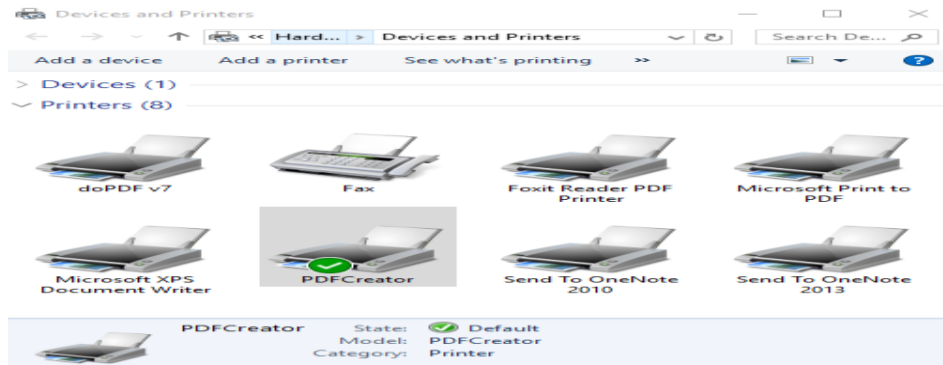

Figure 6. 1 Printers and Faxes (under the Control Panel)

Check printing preferences for a printer

Printing preferences include options for printing such as:

- The size of the paper you are printing to

- Whether the document you are printing has a horizontal (landscape) or vert portrait layout

- Whether you want to print on both sides or only one side of the paper

- How many copies of the document you want to print?

You can change these options every time you send a document to the printer but you can also set default options so that your preferred options are the default until you change them.

To check or change the default printing preferences for your printer: -

1. In the Printers and Faxes window right-click on the name or icon of the printer.
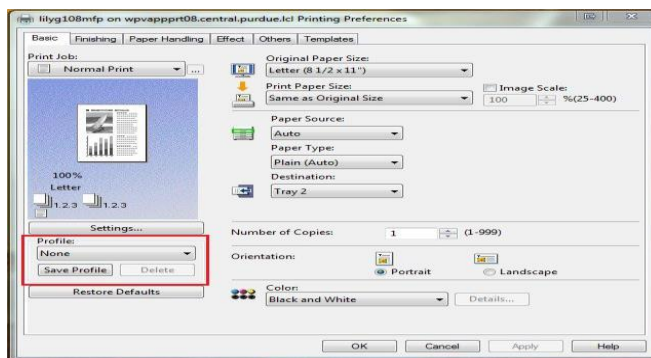
2. Select Printing Preferences from the menu.

Figure 6. 2 The Printing Preferences for Microsoft Office Document Image Writer

6.4 Change printer to default setting

If you have access to more than one printer, then one of those printers will be the default printer. This means it is automatically selected when you send a job to print. In Figure 6.3**.** you can see that the default printer has a tick on it.

To set a printer as the default printer:

1. In the Printers and Faxes window right-click on the name or icon of the printer.
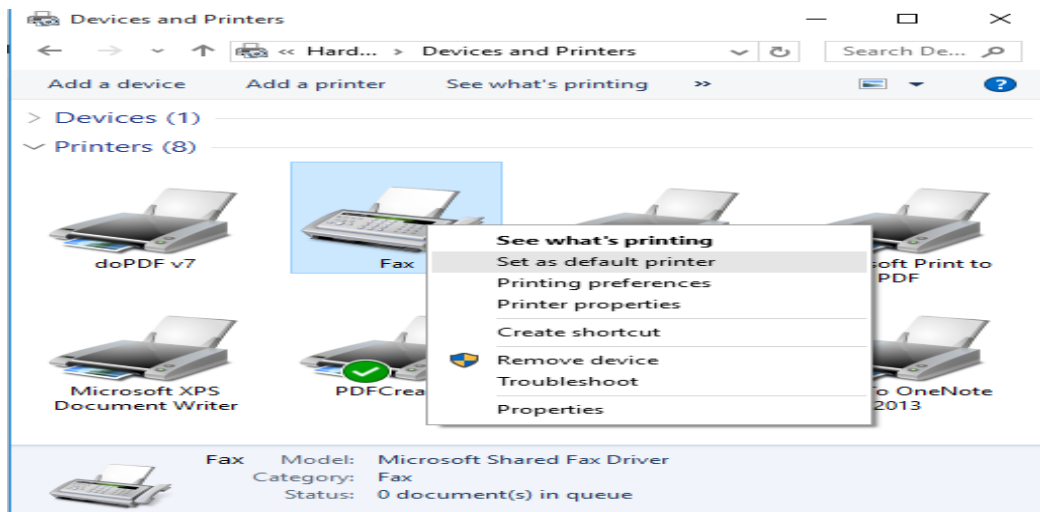
2. Select Set as Default Printer from the menu.

Figure 6. 3 Select Set as Default Printer to make this printer the default.

6.5 Print document

You can send a document to the printer from the desktop *or* from within the application program that created the document.

**To print one or more documents from the desktop:**

1. Open a folder that contains one or more documents.

2. Click on the name of the file you want to print.

3. To print more than one file, hold down the Control (Ctrl) Key on your keyboard and keep clicking on files to add them to the selection.

4. When all the files are selected, right-click on one of the selected files. Select Print from the menu. All the files you selected will be sent to the printer.

6.5.1 Print a web page

To practice printing a document from within an application program, try printing a page from a website. Your computer needs to be connected to the Internet and have a web browser such as Internet Explorer.

- Double-click on the Internet Explorer icon on the desktop to open the program. (If your web browser is not on the desktop you may need to open the program from Start then the All-Programs menu.) When the browser program is open you will see the Internet Explorer menus at the top of the window.

- Click on the File menu then select Print from this menu.
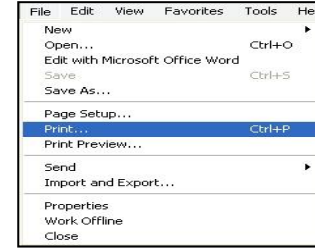
The Print box allows you to change the printer and change the printing preferences for the job. (Note that any changes here do not permanently override the default settings)
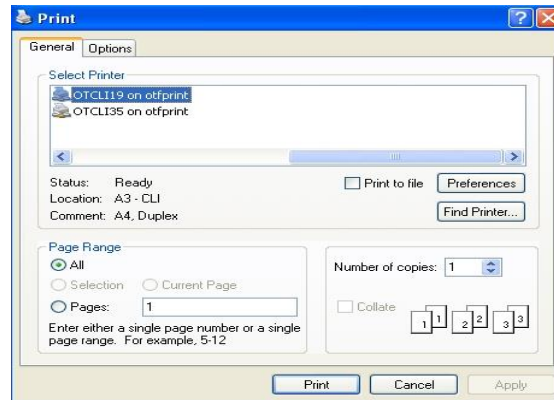
Figure 6. 4 Allows you to change print settings

When you have made any changes to the print options click on Print to send the page to the printer or click on Cancel if you don't want to print the page. You can print a document from within any application program in the same way. That is:

1. Open the document you want to print (Double-click on the filename if it is not already open.)

2. Click on the File menu then select Print.

3. In the Print box check the printing preferences for your job.

4. Click on Print.

6.5.2 View the progress of print jobs

If a document is taking a long time to print or the printer is busy with other people's print jobs, you can check all the jobs that have been sent to a printer and see where your job is in the queue. From the queue you can also delete a print job if you decide you want to cancel it. To view the progress of a print job:

1. Open Printers and Faxes in the Control Panel.
2. Double-click the printer icon to open the print monitor where you can see the jobs currently in the queue for that printer.
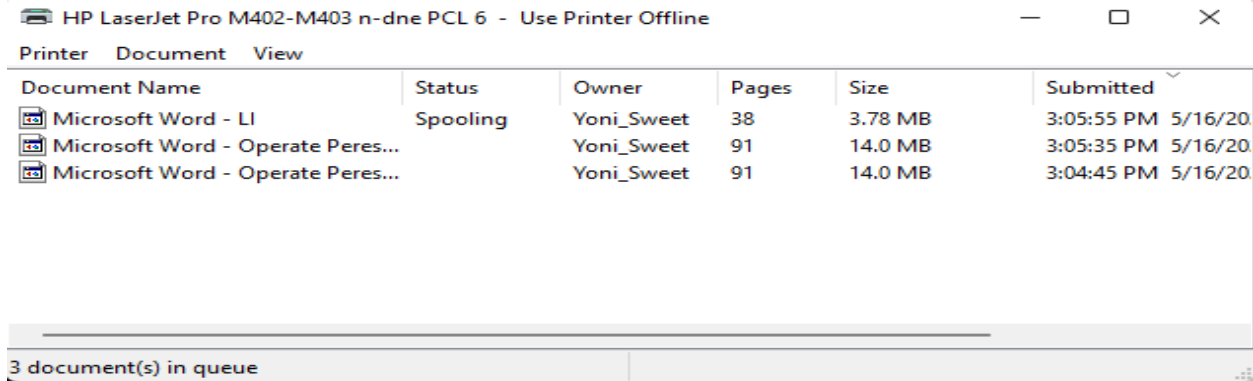

Figure 6. 5 Close up of a print queue

3. The print monitor lists the files that have been sent to the printer which are either in progress or waiting to be printed. The order of files in the list is the order they will be printed. Check the Status column (next to Document Name) to see the name of the file that is currently printing. Once a job has printed it will disappear from the queue.

6.5.3 Delete a print job

To delete a job from the print queue:

1. In the print monitor window click on the name of the document you want to delete.
2. Press the Delete key on your keyboard.
3. The following box appears:
4. Click on Yes to delete the print job. Click on No if you do not want to delete it.
5. The word Deleting will appear in the Status column.

Note: If you are working over a network, you cannot usually delete the print jobs that some else has sent (as you would not have the permission to do this).

6.5.4 Shortcuts to the print monitor

If you are not quick enough the document may start to print before you get a chance to delete it. So, you may like to use a shortcut to access the print monitor quickly. There may be a shortcut to

the print monitor on the Task Bar of your desktop. Otherwise, you can create a shortcut to a print monitor:

1. Open Printers and Faxes in the Control Panel.
2. Click on the printer icon you want to access. Hold down the mouse button and drag the icon to the desktop.
3. A shortcut to the print monitor is now on the desktop.

You can double-click this icon anytime to check the print jobs sent to this printer and to delete the jobs you have sent.

Self-Check 6:

Directions: Answer all the questions listed below.

Test 1: Answer all the questions listed below If the statement is correct say True Else False

1. If you are working over a network, you cannot usually delete the print jobs that some else has sent (as you would not have the permission to do this).

2. Check the Status column (next to Document Name) to see the name of the file that is currently printing. Once a job has printed it will disappear from the queue.

3. You cannot check all the jobs that have been sent to a printer and see where your job is in the queue.

Test 2: Answer all the questions listed below Describe or write the correct answer

1. What printer could serve many computers so you may not be the only person sending jobs to a printer.

2. _____ printer is automatically selected when you send a job to print.

3. Give the four (4) Printing preferences options for printing.

4. In changing printing preference, what are the 2 orientations of the document?

5. Where you can select more printing preference?

6. List the steps of default printer:

Operation Sheet 6.1 Adding printers and ensure printer setting

- **Operation title:** Add Printers

- **Purpose:** Add Printers

- **Instruction:** Use the given step below appropriately. For this operation you have given 20 minutes and you are expected to provide the answer.

- **Tools and requirement:**   Computer and printer

- **Precautions:** before starting computer and add printer

- **Procedures 1**

    Step 1   Click on Start and then select the Control Panel.

    Step 2   Double-click on Printers and Faxes to open this item.

    Step 3   In Printers and Faxes**,** you see the names of the computer/s that you should be able to access.

- **Procedures 2**

    Step 1   In the Printers and Faxes window right-click on the name or icon of the printer.

    Step 2   Select Printing Preferences from the menu.

    Step 3   To change the paper size, you want to print on, click on the arrow next to the box

    Step 4   under Page size. Select a different paper size from the popup menu.

    Step 5   To change the orientation of your document page, click in the button next to either

    Step 6   Portrait or Landscape.

    Step 7   Click OK to save any changes or cancel to keep the same settings.

- **Quality Criteria:** adding printer and adjusted setting acceptable

Operation Sheet 6.2 Procedures of printing information

- **Operation title:** Print information
- **Purpose:** Create and naming folder and sub-folder
- **Instruction:** Use the given step below appropriately. For this operation you have given 20 minutes and you are expected to provide the answer.
- **Tools and requirement:** Computer
- **Precautions:** before starting computer print information
- **Procedures 1**

    Step 1   Open Printers and Faxes in the Control Panel.

    Step 2   Double-click the printer icon to open the print monitor where you can see the jobs currently in the queue for that printer.

    Step 3   The print monitor lists the files that have been sent to the printer which are either in progress or waiting to be printed.

- **Procedures 2**

    Step 1   In the print monitor window click on the name of the document you want to delete.

    Step 2   Press the Delete key on your keyboard.

    Step 3   The following box appears:

    Step 4   Click on Yes to delete the print job. Click on No if you do not want to delete it.

    Step 5   The word Deleting will appear in the Status column.

- **Quality Criteria:** print given information and deleting unnecessary job and adjusted setting acceptable

LAP Test 6

Tasks 1: installing printers properly and print test page.

Tasks 2: Print any information as you want.

Tasks 3: Deleting a print job.

Reference

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