What is a computer ?

- An electronic device that stores, retrieves, and processes data, and can be programmed with instructions. A computer is composed of hardware and software, and can exist in a variety of sizes and configurations
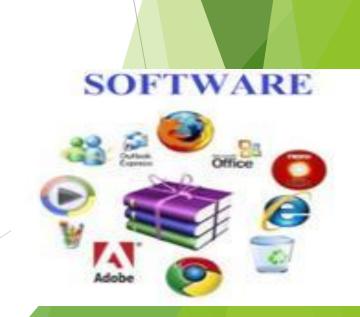
Hardware & Software

▶ The term <u>hardware</u> refers to the physical components of your computer such as the system unit, mouse, keyboard, monitor etc.

▶ The <u>software</u> is the instructions that makes the computer work. Examples (Facebook, Microsoft Word Document, etc.)

Hardware Components

▶ **Input Devices**

- ✓ It Means " How to tell it what to do"

- ✓ A keyboard and mouse are the standard way to interact with the computer. Other devices include joysticks and game pads used primarily for games.

▶ **Output Devices**

- ✓ It Means "How it shows you what it is doing"

- ✓ The monitor (the screen) is how the computer sends information back to you. A printer is also an output device

Input devices

1- The Mouse

a handheld hardware input device that controls a cursor in a GUI (graphical user interface) for pointing, moving and selecting text, icons, files, and folders on computer.

2- The Keyboard

The keyboard is still the commonest way of entering information into a computer.

3- Tracker Balls

an alternative to the traditional mouse and often used by graphic designers.

Input Devices

4-Scanners

A scanner allows you to scan printed material and convert it into a file format that may be used within the PC.

5- Joysticks

Many games require a joystick for the proper playing of the game.

Output devices

1- Monitor

The computer screen is used for outputting information in an understandable format.

2- Printers

There are many different types of printers. In large organizations laser printers are most commonly used due to the fact that they can print very fast and give a very high quality output.

Output devices

3- Plotters

A plotter is an output device similar to a printer, but normally allows you to print larger images.

4- Speakers

Enhances the value of educational and presentation products.

Software components

1- Operating systems software

- The operating system is a special type of program that loads automatically when you start your computer.

- The operating system allows you to use the advanced features of a modern computer without having to learn all the details of how the hardware works

- The link between the hardware and you, the user

- Makes the computer easy to use without having to understand bits and bytes

2- **Applications Software**

- An application program is the type of program that you use once the operating system has been loaded.

- Examples include word-processing programs, spreadsheets and databases

Types of computers?

1- Mini and Mainframe Computers

Very powerful, used by large organizations such an banks to control the entire business operation. Very expensive!

2- Personal Computers

Cheap and easy to use. Often used as stand-alone computers or in a network. May be connected to large mainframe computers within big companies.