

Computer



The Role of Computers:

- A computer is an electronic device that you can use to store and process information. Computers help you perform a variety of tasks such as receiving and sending e-mail messages to family and friends, making presentations, and maintaining records. Computers are used for various business and recreational activities. You can save time, effort, and money by using computers.
- Computers play a major role in our daily lives. They are used virtually everywhere we go, such as industries, schools, government offices, and shops.

Computer Functions:

A computer has four functions:

1. To Accept data- *Input*
2. To Process data- *Processing*
3. To Produce output- *Output*
4. To Store results- *Storage*



Input

Everything a user “tells” a computer.

Commands are given to the computer in different ways depending on the type of Interface being used. They can be a typed command, selected from a menu, or clicked with a mouse.

Running programs, software, uploading data and responding to a computers question are also considered Input.



Processing

The thinking that the computer does - the calculations, comparisons, and decisions.

A computer's speed is often compared to its central processing unit (CPU), the part of the computer where all computer processing takes place. However, speed is also affected by the amount of RAM memory that is available.



Output

Data that has been processed into useful form, now called Information. It can be described as:

Hard copy: printed on paper or other permanent media

Soft copy: displayed on the screen or by other non-permanent means



Storage

If you do not save your work to a Storage Device like the computer's Hard Drive, a USB Drive, a CD or a Network Drive like the Assignment Drive, that information will be lost when you close the program.

Memory Speed measures the time it takes to move data in or out of memory. It is measured in *megahertz (MHz)*.

Memory Capacity measures the amount of data that a device can hold. It is measured in *bytes*. The Prefix Mega (MB), Giga (GB) and Tera (TB) describe if the bytes are numbered in the Millions, Billions or Trillions.



Storage Devices

- You use storage devices to keep computer information for later use. Storage devices come in many forms. Some examples are hard drive or disk, CD-ROM, floppy disk, and DVD-ROM. Storage devices can be divided into two types, internal storage devices and external storage devices. Some common storage devices are :
 - Hard Disk
 - Floppy Disk
 - CD-ROM or DVD-ROM
 - USB Flash Drive
 - Cloud Storage



Hard Disk Drive & Floppy Disk

- *Hard disk drive.* A magnetic disk that is usually the main storage device on most computers. It can be an external or an internal device.
- *Floppy disk.* A portable storage device that allows you to store a small amount of data. A disadvantage of this disk is that it can be easily damaged by heat, dust, or magnetic fields.



CD and DVD ROM

- *CD-ROM*. A portable storage medium that allows you to store 400 times more data than on a floppy disk. It is less prone to damage than a floppy disk.
- *DVD-ROM*. A portable storage medium that is similar to a CD-ROM; however, it can store larger amounts of data than a floppy disk or a CD-ROM. A DVD-ROM is commonly used to store movies and videos.



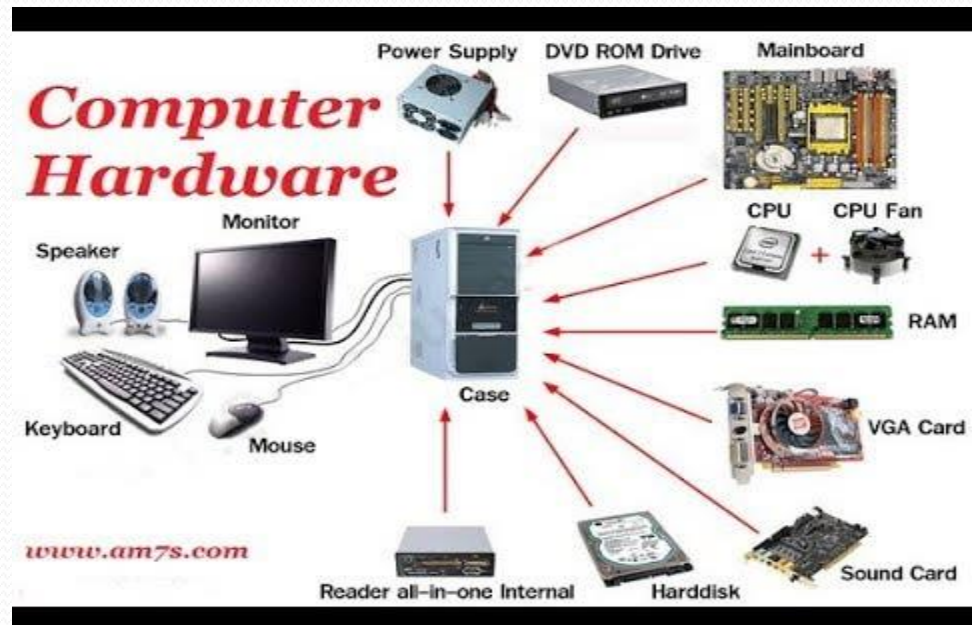
Flash Storage

- *USB flash drive.* A small portable storage device that is typically the size of a thumb. They can be plugged into any computer with a USB drive and as such are a very popular medium of storage.
- *Flash Memory Cards.* Used in digital cameras, cell phones, video game consoles and MP3 players, flash memory cards come in many shapes and sizes. You will need a card reader to retrieve the information once it is removed from the device.



Hardware

- *Hardware* refers to all the physical components of a computer. It includes all input devices, processing devices, storage devices, and output devices. The keyboard, mouse, motherboard, monitor, hard disk, cables, and printer are all examples of hardware.



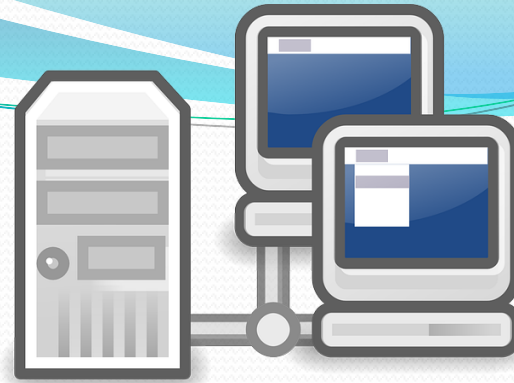
Software



- *Software* refers to instructions that tell a computer how to perform a function. Software can also be referred to as a program or application. Software must be downloaded to a computer and installed before it can be used.



Networks



- You can connect your computer to other computers to share information and hardware components. A group of computers and associated devices that are linked together to facilitate sharing information is called a *network*. Networks can also be used to share data and devices such as printers. You can also communicate with other computer users on the network.
- Our entire school is connected on a network. You can access the “Template” Drive from any computer in our school. You can send a document from any classroom to print in the office.

Input Devices

- You use input devices to provide information to a computer or to give instructions to a computer for performing a task. Some examples of input devices are:
- *Mouse*
- *Keyboard*
- *Microphone*
- *Scanner*
- *Webcam*
- *Stylus*
- *Trackball*



Output Devices

- You use output devices to get feedback from a computer after it performs a task. Some examples of output devices are.
- *Monitor*
- *Printer*
- *Speaker/Headphone*

