

## COMPUTER:

A computer is an electronic device which is made up of many parts. Data is entered into the computer by using input devices like - keyboard, mouse, scanner, etc. A computer gives us information using output devices like – monitor, printer, speaker, etc. The central processing unit (CPU) does all the processing in a computer. The storage devices allow us to save data as a file for future use. Although computers have so many advantages, it has some limitations as well.

### Advantages of a computer:

1. It never makes a mistake.
2. It works very fast.
3. It never gets tired.
4. It can do many things at a time.
5. It can store a lot of information.

**Limitations of a computer:** Let us understand some weak points of a computer:

1. A computer cannot make decisions on its own.
2. Producing a computer generates a lot of e-waste, which harms the environment.
3. There are many illegal activities that can be carried out using computers. This is known as Cybercrime.

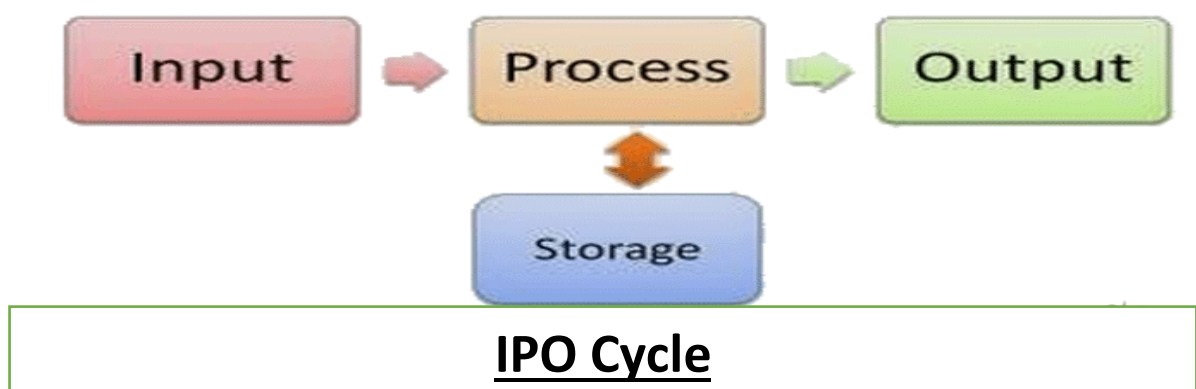
### Working of a computer (IPO cycle):

It takes input from input devices, processes it, stores it, and then gives output to output devices.

**Input:** The data and instructions that you give to the computer is known as input.

**Output:** The results that we get after processing is known as output.

**Process:** CPU does all the processing in a computer. It follows instructions given by us and decides which data to process and how to process it.



**Parts of a computer:** A computer is made of four main parts.

1. **Monitor:** It shows us what we are doing on the computer. It looks like a television. It is an *output device*.
2. **Keyboard:** It is used to type numbers, letters, and symbols. It has different keys such as – *Alphabet keys, number keys, and special keys*. It is an *Input device*.
3. **Central Processing Unit (CPU):** It is a processing device. It does all the thinking when we work on the computer and all calculation is done by CPU. It is the *brain of the computer*.



#### Cabinet:

CPU cabinet is a box that contains the CPU. It has different parts which are : ON/OFF buttons, points to connect other parts and devices, and places for other storage devices.





4. **Mouse:** A mouse is a *pointing device* that helps us to select objects by clicking. There are two buttons in it - *left* and *right* for left click and right click and a *scroll wheel* for scrolling up & down. The mouse pointer moves in the direction of the mouse. It is an *Input device*.

**Scroll bar:**



## Input & output devices:

There are many other devices that you can connect to a computer. They are mainly divided into three categories - *Input devices*, *Output devices*, and *storage devices*.

**Input devices:** An input device is used to enter data into a computer.

**Microphone** = A microphone is used to input or record audio/ sound into a computer. It is commonly known as **Mic**.

**Scanner** = Used to read from a sheet of paper and send it to the computer.

**Joystick** = Used to play games.

**Keyboard** = Used to type numbers, letters, and symbols into a computer.

**Mouse** = Used to select objects by clicking.

**Output devices:** An output device shows the result of the data processed by a computer.

**Printer** = Prints the data on a sheet of paper.

**Monitor** = Shows us what we are doing on the computer.

**Speakers** = Used to hear the sounds loudly.

**Headphones** = Used to listen to music or sound without disturbing others.

**Storage Devices:** Storage devices are used for holding data.

- **HDD (Hard Disk Drive):** It is the main storage device of a computer and can store huge amounts of data. It is permanently present inside the CPU cabinet.
- **SSD (Solid State Drive):** Solid-state drives are the most common storage drives today. SSDs are smaller and faster than hard disk drives (HDDs). SSDs are noiseless and allow PCs to be thinner and more lightweight.
- **External Hard Disk:** It is similar to a hard disk but it is connected to the computer from outside of the CPU cabinet. It is used to store and carry large amounts of data from one location to another.
- **Pendrive:** It's a small portable device that is used to store data. It is so small that you can carry it in your pocket.
- **CD & DVD:** CD = Compact Disc  
DVD = Digital versatile disc

It is round in shape and has shiny surface. A DVD has more space than a CD.

**Storage capacity:**

A **CD** holds about **700 MB** or 0.7 GB.

A **DVD-5** is a single layer DVD that holds up to **4.7GB** of data.

- **Memory card:** It is a tiny storage device used to store data in digital camera, smartphones, etc.

## Hardware and software:

– Yaseen Shaikh

Hardware and software are both necessary for a computer system to work, they are two interdependent components of a computer system that work together to enable a computer to function.

- **Hardware**

Hardware is the physical parts of a computer that we can see and touch, such as the CPU, memory, motherboard, hard drive, and external devices like a monitor, mouse, and keyboard. It is tangible and rigid and is often replaced when damaged.

- **Software**

The instructions and data (that we can see but cannot touch) that tell the hardware how to function, such as operating systems, applications, and utility software. Or we can say that - Software is a set of instructions that tells the computer what to do, when to do it, and how to do it. Software is intangible and easy to change and can be reinstalled if damaged.

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### Full forms:

CPU = Central Processing Unit

RAM = Random Access Memory

ROM = Read Only Memory

HDD = Hard Disk Drive

SSD = Solid State Drive

CD = Compact disc

DVD = Digital Versatile disc

IC = Integrated circuit

AI = Artificial Intelligence

Cmd = command

– Yaseen Shaikh

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### Shortcut cmd:

*Ctrl + A = select All*

*Ctrl + B = **Bold***

*Ctrl + F = Find*

*Ctrl + I = Italic*

*Ctrl + O = Open documents*

*Ctrl + S = Save the document*

*Ctrl + W = Close the document*

*Alt + tab = Switching between opening apps*

*Ctrl+X = Cut the selected content to the Clipboard*

*Ctrl + C = Copy the selected content to the Clipboard*

*Ctrl + Z = To undo an action*

*Ctrl + U = Underline the selected content*

*Ctrl + V = Paste the selected content*

*Ctrl + Y = To redo an action*

*Alt + F4 = Close the opening file*

*Shift + Alphabet = Capitalize Alphabet*

