

**Computer**-> A computer is an electronic machine which accepts input from the users, processes it and generates the desired output.

Full Form of Computer

C – Commonly

O – Operating

M – Machine

P – Purposely

U – Used For

T – Training

E – Education

R – Research

There are two main components of a computer system.

Namely:- Hardware and Software.

**Hardware:** - > The physical components of a computer system which we can touch and feel are called hardware.

Example :-> SMPS (Switch Mode Power Supply), UPS (Uninterrupted Power Supply), RAM (Random Access Memory), ROM (Read Only Memory), Monitor, Keyboard, Speaker etc.

Hardware can be classified in four types:-

**Input Devices:** Input devices are those hardware devices which accept input from users and send into processing devices for further processing.

Examples:- Scanner, Mouse, Keyboard, Joystick, MICR (Magnetic Ink Character Recognition) etc.

**Output Devices:** Output devices are those devices which display the final result of processed data.

Example: - Monitor Printer, Speaker, and Plotter etc.

**Processing Devices:** Processing devices are those devices which process the instructions (input) received from the user and after processing send the final result to the output devices.

Example: - CPU (Central Processing Unit), Microprocessor etc.

Note:- Definitions of CPU and Microprocessor.

CPU: - The microprocessor that governs all other microprocessors.

**Microprocessor:** A microprocessor is an electronic device that executes micro instructions at the speed of microseconds.

Note: - Every CPU is a microprocessor but every microprocessor is not a CPU.

Remark: Every CPU is a microprocessor but every microprocessor is not a CPU.

**Storage Devices:** Storage devices are those devices which are used to save data or information temporarily or permanently in a computer system.

Examples:- RAM (Random Access Memory)

ROM (Read Only Memory)

HDD (Hard Disk Drive)

PD (Pen Drive)

DVD (Digital Versatile Disc)

MC (Memory Card)

**Software:** Software are a set of programs which we can't feel by touching but can feel by seeing, listening and by the environment provided by the programs.

Software can be broadly classified into two main categories.

**Application software:** They are those software which are application specific and made for special purpose to perform routine tasks.

Example: Calculator, MS-Paint, MS-Word, MS Excel, MS Powerpoint, MS Access, MS Frontpage, Coral Draw, Adobe Photoshop, Adobe Premier Pro, Adobe Illustrator, Adobe Flash, Payroll, Inventory etc.

**System Software :** System Software are those software which are used to control and manage the overall activities of the computer system.

Example : MS – DOS (Disk Operating System), Windows 95, Windows 98, Windows 2000, Windows XP (Experience), Windows Vista, Windows 7, Windows 8, Windows 10, Linux, Red Hat, Fadero, Suse, Backtrack, Kali, Ubuntu, Apple DOS (Disk Operating System), Compiler, Assembler, Interpreter etc.

**Operating system:** Operating system is that system which is used to control and manage the overall activities of the computer system. It provides a user friendly environment where a user can work with ease. An operating system always acts as an interface between the user and the computer hardware. All operating systems are system software but all system software are not operating system.

Example : MS – DOS (Disk Operating System), Windows 95, Windows 98, Windows 2000, Windows XP (Experience), Windows Vista, Windows 7, Windows 8, Windows 10, Linux, Red Hat, Fadero, Suse, Backtrack, Kali, Ubuntu, Apple DOS (Disk Operating System), etc

Operating System can be classified into the following categories:

- 1) **Character User Interface (CUI)** – It is the user interface that allows the user to interact with electronic devices or gadgets through line of text/command instead of using images graphics, icons, visual indicators etc.  
Examples: MS – DOS (Disk Operating System), Apple DOS (Disk Operating System), etc.
- 2) **Graphical User Interface (GUI)** – It is the user interface that allows the user to interact with electronic devices or gadgets through images, graphics, icons, visual indicators etc. instead of lines of text or command.  
Examples: Windows 95, Windows 98, Windows 2000, Windows XP (Experience), Windows Vista, Windows 7, Windows 8, Windows 10, Linux, Red Hat, Fadero, Suse, Backtrack, Kali, Ubuntu, Apple DOS (Disk Operating System), etc