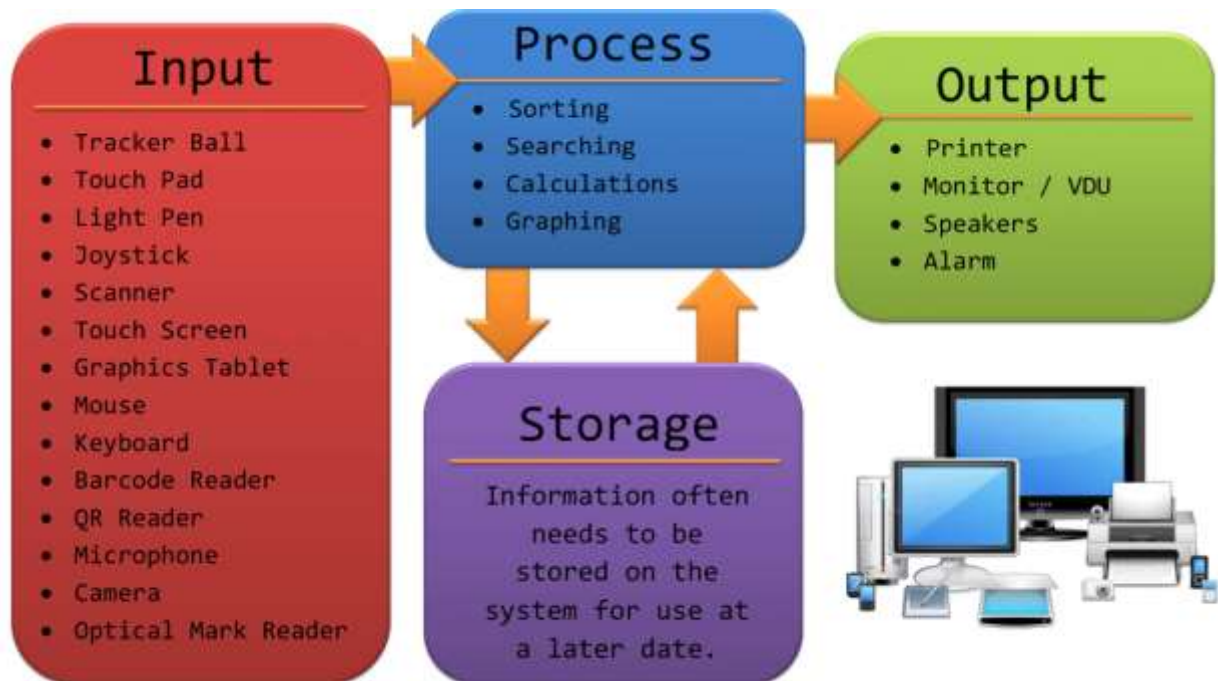


# COMPUTER

A computer is an electronic data processing device, which accepts and stores data input, processes the data input, and generates the output in a required format.



## FULL FORM OF COMPUTER

C	=	Commonly
O	=	Operate
M	=	Machine
P	=	Particularly
U	=	Used For
T	=	Trade
E	=	Education
R	=	Research

# **COMPONENT OF COMPUTER**

- ☑ Hardware
- ☑ Software
- ☑ User

## **HARDWARE**

Hardware is the physical parts of computer which we can see and touch and used to make up a computer. For example, Monitor Keyboard, Mouse, Printer, Speaker, C.P.U. etc.

## **HARDWARE COMPONENT OF COMPUTER**

- ➡ Input Unit
- ➡ Central Processing Unit
- ➡ Output Unit

### **1. Input Unit**

This unit contains devices with the help of which we enter data into the computer. This unit creates a link between the user and the computer. The input devices translate the information into a form understandable by the computer. For example, Keyboard, Mouse, Scanner, Camera, Microphone etc.

### **2. C.P.U. (Central Processing Unit)**

CPU is considered as the brain of the computer. CPU performs all types of data processing operations. It stores data, intermediate results, and instructions (program). It controls the operation of all parts of the computer.

CPU itself has the following three components:

- ALU (Arithmetic Logic Unit)
- Memory Unit
- Control Unit

### **3. Output Unit**

The output unit consists of devices with the help of which we get the information from the computer. This unit is a link between the computer and the users. Output devices translate the computer's output into a form understandable by the users. For example, Printer, Monitor, Speakers etc.

## **SOFTWARE**

Software is a collection of data or computer instructions that tell the computer how to work. It is also known as the logical part of the computer. For example, Microsoft Office Word 2016, Microsoft Office Excel 2016, Microsoft Office PowerPoint 2016, Google Chrome etc.

### **Types of Software**

- ❖ System Software
- ❖ Application Software

## **USER**

We the trained and skilled peoples who knows how to use the computer according to our requirement. For example, Doctors and Researchers use computer for the purpose of research and cure, Engineers use computer to design, research, and construct, etc.

## **FEATURES/ADVANTAGES OF COMPUTER**

### **1. Speed**

- a. Computer is a very fast device.
- b. It is capable of performing calculation of very large amount of data.
- c. The computer has units of speed in microsecond, nanosecond, and even the picosecond.
- d. It can perform millions of calculations in a few seconds as compared to man who will spend many months to perform the same task.

### **2. Accuracy**

- a. In addition to being very fast, computers are very accurate.
- b. The calculations are 100% error free.
- c. Computers perform all jobs with 100% accuracy provided that the input is correct.

### **3. Storage**

- a. Memory is a very important characteristic of computers.

- b. A computer has much more storage capacity than human beings.
- c. It can store large amount of data.
- d. It can store any type of data such as images, videos, text, audio, etc.

#### **4. Reliability**

- a. A computer is a reliable machine.
- b. Modern electronic components have long lives.
- c. Computers are designed to make maintenance easy.

### **Types of computer: -**

Basically computers are classified in to three categories.

#### **A. On the basis of functions.**

- 1. Analog computer.
- 2. Digital computer.
- 3. Hybrid computer.

#### **B. On the basis of size.**

- 1. Mainframe computer.
- 2. Minicomputer.
- 3. Micro computer

#### **C. On the basis of brand.**

- 1. IBM (International Business Machine)
- 2. IBM compatible (Duplicate IBM)
- 3. Apple computer (Macintosh)

### **Boot / Booting:-**

The starting process of a computer is known as booting. There are two types of Boot.

- I. **Cold boot:-** When We Start a computer in OFF stage by using power switch from **C.P.U** (Central Processing Unit)
- II. **Warm boot:-** When we start a computer is ON stage by using reset switch from **C.P.U**

## **MEASUREMENT UNIT OF MEMORY**

0 or 1	=	1 Bit
4 Bits	=	1 Nibble
2 Nibbles	=	1 Byte
1024 Bytes	=	1 Kilobyte(KB)
1024 Kilobyte	=	1 Megabyte(MB)
1024 Megabyte	=	1 Gigabyte(GB)
1024 Gigabyte	=	1 Terabyte(TB)
1024 Terabyte	=	1 Petabyte(PB)
1024 Petabyte	=	1 Exabyte(EB)
1024 Exabyte	=	1 Zettabyte(ZB)
1024 Zettabyte	=	1 Yottabyte(YB)