## Computer System and its Organisation

The organisation of the computer system consists of different units. All the units have specific components designed to perform some particular task.

The units of the computer system are:

* Input Unit
* Output Unit
* Central Processing Unit (CPU)
* Storage Unit

### 1. Input unit

All the information, data, or commands are provided to the computer systems as input through input devices. The keyboard, microphone, scanner, or mouse are the input devices that help the user enter the data in distinct forms.

The keyboard allows the user to enter input as characters, numbers, or symbols. Through the mouse, you can select any file or folder. No matter in what form the input is entered, it is changed into binary codes (machine language) of 1s and 0s. This is done as the computer can only understand the machine language. Once the input has been received, then comes the work of the Central Processing Unit (CPU).

### 2. Output Unit

The output devices provide the result of the command provided to the computers. Monitor, keyboard, printer are some of the output devices connected to the computer systems.

For example, if the user is writing something on the word processor through the keyboard, it gets displayed on the monitor screen. Since the monitor screen provides the result, it is the output unit.

### 3. Central Processing Unit

After receiving the input through the input unit, the data goes to the CPU, where the complete processing of the data occurs. The entered information and data are stored in the primary memory, RAM (Random Access Memory), by the CPU. For processing, any data CPU takes it from the RAM. Now CPU has its own three main components:

#### Arithmetic Logic Unit

The function of the Arithmetic Logic Unit, as the name suggests, performs arithmetic and logical operations. Once the input is entered, it is stored in RAM and sent to ALU for processing.

After the arithmetic and logical operations are done, the output/result gets stored in primary memory for a while. Then it is transferred to secondary memory, that is, a storage unit. From there, it is sent to the output unit, which provides the output to the user.

#### Control Unit

The function of the control unit is to get the information from the RAM (primary memory), decode the data, and then implement them. Through the control unit, the CPU interacts with the input/output device and the system’s memory.

The Control unit is one of the main components of the CPU. It is responsible for directing the system’s operation by executing the program’s instructions.

#### Register Set

The Register Set usually varies from one system to another. It includes a general-purpose register that saves the output temporarily in the primary memory. The other registers are special-purpose registers. Their work is to execute the programs.

### 4. Storage Unit

As read above, the data or input that is entered is stored in the primary memory, i.e., RAM, before the processing occurs. Even after the execution, the output is stored temporarily in the primary memory and then in the second memory; it is sent to the output unit to provide the results.

The storage unit is used to store all kinds of data at every processing step. The devices such as hard disks allow the user to store data in different forms. A hard disk is a storage unit that provides the computer with sufficient space to store data and programs.