Sri Ramanuja ePaatashala

Sri:
Srimathe Ramanujaya nama:

Computers & Programming

Hands-on Training:
C with Electronics.

Programming: Programming means to develop software, which is also called a program. software contains instructions that tell a computer what to do.

Programming languages: Software developers create software with the help of powerful tools called programming languages.

Computer: An electronic device which helps in solving problems quickly and easily. It solves problems according to instructions given to it by the computer user called programs or software. Computer stores and process data. It includes both software and hardware.

A computer consists of the following major hardware components:

   i) A central processing unit (CPU)
   ii) Memory (main memory)
   iii) Storage devices (such as disks and CDs)
   iv) Input devices (such as the mouse and
      the keyboard)
   v) Output devices (such as monitors and
      printers)
   vi) Communication devices (such as modems
      and network interface cards (NIC))
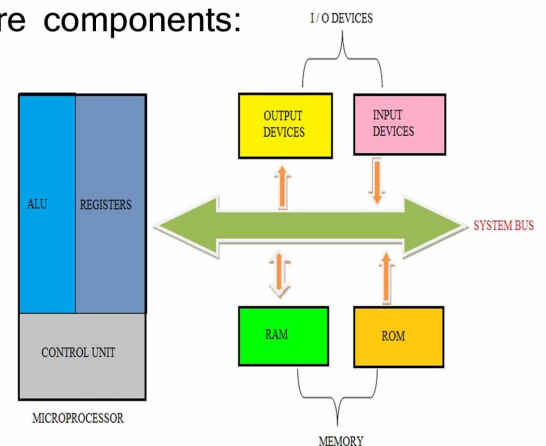
A computer's components are interconnected by a subsystem called a **bus**. The bus is built into the computer's **motherboard**, which is a circuit case that connects all of the parts of a computer together.

Central Processing Unit: The central processing unit (CPU) is the computer's brain. It retrieves instructions from the memory and executes them. The CPU usually has two components: a control unit and an arithmetic/logic unit. The control unit controls and coordinates the actions of the other components.
The arithmetic/logic unit performs numeric operations (addition, subtraction, multiplication, and division) and logical operations (comparisons).

Every computer has an internal **clock** that emits electronic pulses at a constant rate. These pulses are used to control and synchronize the pace of operations. A higher clock speed enables more instructions to be executed in a given period of time.
The unit of measurement of clock speed is the hertz (Hz), with 1 Hz equaling 1 pulse per second. In the 1990s, computers measured clock speed in megahertz (MHz), but CPU speed has been improving continuously; the clock speed of a computer is now usually stated in gigahertz (GHz). Intel's newest processors run at about 3 GHz.

*L*ife must continue. And continue towards perfection, through progress, evolution, through self-initiative. Impatience can not lead to do that. Frustration is its enemy.