

Computer: it is combinations of electronic parts put together to form a particular Machine, its job is to receive data and information; perform some mathematical and/or logical operations, to get some results displayed on one of its devices.

output



Computer units

All types of computers consist of the following:

1. **Input Unit:** This is responsible for receiving data and information from memory to be ready to send it for processing.
2. **Output Unit:** This unit is responsible for receiving all data and information from memory after it has been processed and displaying it on one of the output devices.
3. **CPU (Central Processing Unit):** The CPU is comprised of three main parts :
 - ❖ Arithmetic and Logic Unit (ALU): Executes all arithmetic and logical operations. Arithmetic calculations like as addition, subtraction, multiplication and division. Logical operation like compare numbers, letters, or special characters
 - ❖ Control Unit (CU): controls and co-ordinates computer components.
 1. Read the code for the next instruction to be executed.
 2. Increment the program counter so it points to the next instruction.

3. Read whatever data the instruction requires from cells in memory.
4. Provide the necessary data to an ALU or register.
5. If the instruction requires an ALU or specialized hardware to complete, instruct the hardware to perform the requested operation.

❖ **Memory unit:** Stores the data that is to be executed next, "very fast storage area".

The CPU performs four steps in executing an instruction:

1. The control unit (CU) gets the instruction from memory.
2. The CU decides what the instruction means and directs the necessary data to be moved from the memory to the arithmetic logic unit (ALU).
3. The ALU performs the actual operation on the data.
4. The result of the operation is stored in memory or a register.

Secondary Storage Unit: the information we get from the processing operation need to be saved on permanent storage area. The secondary storage unit used to save these information and data.

