Unit 1.4.1 : Memory

- Computer memory is any physical device, capable of storing information temporarily or permanently

- Memory refers to the computer hardware integrated circuits that store information for use in a computer.

Type of Memory

Computer memory is of two basic type.

(i) Primary memory / Volatile memory

(ii) Secondary Memory / Non volatile memory.

(i) **Primary memory / volatile memory** :- volatile memory is a computer storage that only maintains its data while the device is powered

Example: RAM (Random Access Memory) is volatile. When we are working on a document, it is kept in RAM. and if the computer losses power your work will be lost.

(ii) Secondary memory / Non-volatile memory :- Non valatile memory is a type of computer memory that has the capability to hold saved data even if the power is turned off.

Example :- Read-only memory (ROM) Hard disk, floppy disk, etc

① Random Access Memory (RAM)

- It is also called as read write memory or the main memory or the primary memory.
- The programs and data that the CPU requires during execution of a program are stored in this memory.
- It is a valatile memory as the data loses when the power is turned off.

- RAM is further classified into two types - SRAM (static Random Access Memory) and DRAM (Dynamic Random Access Memory).

② Read only Memory (ROM)

- Stores crucial information essential to operate the system, like the program essential to boot the computer.
- It is non volatile.
- Always retains its data.
- Used in calculations and peripheral devices.
- ROM is further classified into 3 types - PROM, EPROM, and EEPROM