## RAM & ROM both are parts of internal Computer memory only.

## <u>In the lecture, By ROM, I wanted to indicate External Memories like Hard Disk Drive, SSD (C:, D:, E: ...) & others. Rectify it.</u>

## **Differences Between RAM and ROM:**

Aspect	RAM (Random Access Memory)	ROM (Read-Only Memory)
Definition	A temporary memory used to store data and programs while the computer is running.	A permanent memory where instructions necessary for booting the system are stored.
Volatility	Volatile – Data is lost when power is turned off.	Non-Volatile – Data remains even when power is turned off.
Write and Read	Both writing and reading data are possible.	Only reading is possible; writing is possible in special cases (e.g., Flash ROM).
Usage	Used to run software and process data.	Stores instructions required to boot the system.
Speed	Works very fast.	Relatively slower.
Types	DRAM, SRAM, etc.	PROM, EPROM, EEPROM, etc.

## Examples:

- **RAM:** When a program is run on a computer, its data is loaded into RAM.
- **ROM:** BIOS or firmware is stored in ROM.