Non-volatile Memory

* RAM is volatile memory which contains data and Instructions that is directly used by CPU for processing.

* We try to structure the data in RAM to decrease Read/Write time to decrease less CPU cycles.

* Data in RAM is temporary, gets reset everytime a machine starts.

⇒ Non-Volatile Memory stores data permanently
  ↳ HDD, SSD
  ↳ Pendrives, Disk
  ↳ Floppy disk
  ↳ ROM

Role of OS in Storage Management

* OS has Code written for →

1. Process Management —→ Scheduling
   ⤷ Synchronisation

2. Deadlock Handling

3. Memory Management (RAM)

4. Network Management (OSI Layer)

5. Storage Management (Hard disk)

* HDD are much slower than RAM

≈ RAM 100 X faster than HDD

* OS responsibility is to provide I/O system calls to the application programs.