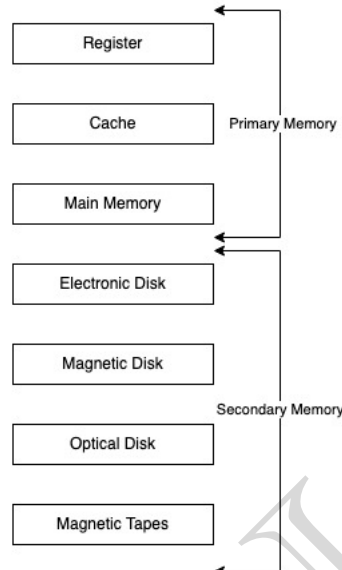


## Lec-8: Storage Devices Basics



What are the different memory present in the computer system?



1. **Register:** Smallest unit of storage. It is a part of CPU itself.  
A register may hold an instruction, a storage address, or any data (such as bit sequence or individual characters).  
Registers are a type of computer memory used to quickly accept, store, and transfer data and instructions that are being used immediately by the CPU.
2. **Cache:** Additional memory system that temporarily stores frequently used instructions and data for quicker processing by the CPU.
3. **Main Memory:** RAM.
4. **Secondary Memory:** Storage media, on which computer can store data & programs.

### Comparison

1. **Cost:**
  - a. Primary storages are costly.
  - b. Registers are most expensive due to expensive semiconductors & labour.
  - c. Secondary storages are cheaper than primary.
2. **Access Speed:**
  - a. Primary has higher access speed than secondary memory.
  - b. Registers has highest access speed, then comes cache, then main memory.
3. **Storage size:**
  - a. Secondary has more space.
4. **Volatility:**
  - a. Primary memory is volatile.
  - b. Secondary is non-volatile.