### **Assignment 1:**

* What is Cache Memory?

Cache Memory is Computer component ,it acts as temporary memory storage area that can retrieve data over and over again.It is smaller in size compared to main memory .It’s faster and Costlier than Ram.Hardware used for Cache memory is high-speed static random memory(SRAM).dynamic random access memory(DRAM) used as computer main memory.

There are three types of Caches

1. L1- primary Cache, which is high Speed and small and embedded in processor chip as CPU cache
2. L2- Secondary Cache , It is Separate chip and as alternative bus to connect the cache and cpu

Disk Cache:It uses main memory, Retrive the data from the disk

Smart Caching  in which the system can recognize certain types of frequently used data:

* Cache vs RAM?

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| --- | --- |
| Cache | RAM |
| Cache is faster, more costly, and closest to the CPU | Less faster than Cache |
| Expensive | Less expensive |
| Stores data Temporarily | Stores data permanently |
| Smaller size | Bigger size than Cache |

* What is Disk Management?

 It enables users to view and manage the [disk drives](https://www.computerhope.com/jargon/d/diskdriv.htm) installed in their computer and the [partitions](https://www.computerhope.com/jargon/p/partition.htm) associated with those drives. Each drive is displayed followed by the layout, type, file system, status, capacity, free space, % free, and fault tolerance.

* HDD vs SSD?

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| HDD | SDD |
| Traditional Hardware in Computer | has no moving parts. Instead, it uses NAND flash memory |
| HDDs are good for storing lots of large files, which as more capacity |  |
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