Assignment 1

 What is Cache Memory?

A Cache Memory is a chip-based computer component. It is used as a temporary storage area that computer processors can retrieve data from easily. Cache memory is also referred to as CPU (central processing unit) which is fast and costly and categorized in three levels.

Level 1 Primary Cache – this is fast but small which is embedded in the processor chip as a CPU cache.

Level 2 Secondary Cache -. L2 cache may be embedded on the CPU, or it can be on a separate chip or [coprocessor](https://whatis.techtarget.com/definition/coprocessor) and have a high-speed alternative system bus connecting the cache and CPU. That way it does not get slowed by traffic on the main system bus.

Level 3 Cache is specialized memory developed to improve the performance of L1 and L2. L1 or L2 can be significantly faster than L3 however L3 has twice the speed. Hence it is pushed to the top-level queue.

What is Disk Management?

 Disk Management is a Microsoft Windows utility introduced

in windows XP as a replacement for the fdisk command. It enables users to view

and manage the disk drives installed in their computer and the partitions associated

with those drives. Like layout type, file system, status, capacity, free space, % free, and fault tolerance.

Cache vs RAM?

Both Ram and Caches are memory and their aim is to store data.

RAM (Random Access Memory) is a light-hearted memory which is used by the CPU as the Main Memory of the system. CPU stores frequently used data of the programs running now in RAM as RAM is faster than storage devices. This helps the CPU to work faster.

Cache memory is faster than the RAM but comes with minimal capacity. CPU stores more frequently used data in it so that the CPU can access these data faster.

HDD vs SSD?

Solid state drives and hard disk drives are comparative in their physical details, yet they store information in an unexpected way. There are favorable circumstances and burdens to each kind of drive and settling on which type is directly for you boils down to how you utilize your PC.