1. **How Memory Performance Can Be Improved In Computer System. Explain Any Three Technique To Improve Memory Performance Of A Computer System.**
2. Increasing the size of caches

-cache memory works as a interface between CPU and the main memory.

It has less storage but higher access rate. It contains of certain line sizes where data are fetched from main memory and to CPU. So by increasing the number of caches the memory performance can be improved. Here the concept of catch hit is also used. When the memory required by the CPU is available on cache it is catch hit.

1. Pipelining

-During the process of pipelining, the incoming instructions are fetched in a queue and at the same time the processor is executing the other instructions. So, pipeline makes the use of the CPU faster. So, the efficiency of the CPU is increased.

Locality of reference

* To increase the efficiency of cache memory locality of reference is used. There are two types of reference
* Time:

The block of data that are constantly needed to be fetched are stored in cache memory. This cases is mostly applied in programs with loops.

* Space:

The data is fetched and stored in a cache line and the data above it and near it are also fetched incase the process needs all the data. It is mostly used in arrays