### CSEC227.17

## Features/Pros & Cons of MVT (Multiprogramming with a Variable number of Tasks):

- ➤ MVT (Multiprogramming with a Variable number of Tasks) is the memory management technique in which each job gets just the amount of memory it needs.
- ➤ That is, the partitioning of memory is dynamic and changes as jobs enter and leave the system.
- ➤ MVT is a more ``efficient" user of resources.
- > MFT suffers with the problem of internal fragmentation

## Features/Pros & Cons of paging technique (for memory management):

- The biggest advantage of paging is that it is easy to use memory management algorithm.
- > Paging may cause internal fragmentation.
- > Segmentation method works almost similarly to paging, only difference between the two is that segments are of variable-length whereas, in the paging method, pages are always of fixed size.
- > Swapping is easy between equal-sized pages and page frames.

# Features/Pros & Cons of Page replacement algorithm for LRU (Least Recently Used):

- > It is open for full analysis.
- In this, we replace the page which is least recently used.
- Easy to choose page which has faulted and hasn't been used for a long time.
- > It requires additional Data Structure to be implemented.
- ➤ Hardware assistance is high.
- ➤ In LRU error detection is difficult as compared to other algorithms.
- > It has limited acceptability.
- ➤ LRU are very costly to operate.

### Features/Pros & Cons of Page replacement algorithm for FIFO:

- > It is simple and easy to understand & implement.
- > It is efficiently used for small systems
- > It does not cause more overheads
- > The process effectiveness is low.
- ➤ When we increase the number of frames while using FIFO, we are giving more memory to processes. So, page fault should decrease, but here the page faults are increasing.