

Open Ended Lab for the course CS-329: Operating Systems

The students are required to design and implement **Memory Module of Operating System**. The program should specify the following:

1. Size of Main Memory
2. Memory Management Technique in use by the system
 - The students can choose and justify any technique from the following:
 - Fixed Partitioning (Equal or unequal size partitions)
 - Dynamic Partitioning
 - Paging
 - The program should take input processes (from file or command line), which include their arrival time and total size of each process.
 - The memory module should be able to allocate memory to each process as it arrives.
 - The current state of memory should always be available. Specify the used and free spaces.

To design the system, following factors are important and should be discussed:

- Number of input processes (take at least 10)
- Average/max/min size of processes
- Total amount of main memory (RAM) available