

## Operating System Lab

**Objective :**

- To provide an understanding of the design aspects of operating system

**Recommended Systems/Software Requirements:**

- Intel based desktop PC with minimum of 166 MHZ or faster processor with atleast 64 MB RAM and 100 MB free disk space

**Lab Experiments:**

1. Simulate the following CPU scheduling algorithms  
a) Round Robin   b) SJF   c) FCFS   d) Priority
2. Loading executable programs into memory and execute System Call implementation-read(), write(), open () and close()
3. . Multiprogramming-Memory management- Implementation of Fork(), Wait(), Exec() and Exit() System calls
4. Simulate all File allocation strategies  
a) Sequenced   b) Indexedc) Linked
5. Simulate MVT and MFT
6. Simulate all File Organization Techniques  
a) Single level directory   b) Two level   c) Hierarchical   d) DAG
7. Simulate Bankers Algorithm for Dead Lock Avoidance
8. Simulate Bankers Algorithm for Dead Lock Prevention.
9. Simulate all page replacement algorithms.  
a) FIFO   b) LRU   c) LFU   etc....
10. Simulate Paging Technique of memory management.