

### Assignment -1

1. Define operating system. Also explain about two different views of operating system.
2. Illustrate different types of OS, and briefly explain it.
3. What are different functions of operating system? Illustrate it with help of example.
4. Explain different types of OS structure with help of labelled diagram.
5. Write short notes on:
  - a) System Call
  - b) Shell

### Assignment-2

6. Define process and program. Also differentiate it.
7. Differentiate between process and threads.
8. Explain 5-state process model, along with its transition.
9. Write short notes on:
  - a) PCB
  - b) User mode and Kernel mode
  - c) Short-term , Long-term, Medium-term scheduler
10. Define process scheduling, along with its goals.
11. Write an algorithm for the following scheduling methods:
  - a) First Come First Serve (FCFS)
  - b) Shortest Remaining Time First (SRTF)
  - c) Shortest Job First (SJF)
  - d) Round Robin (RR)
  - e) Priority Based Algorithm (Non-Preemptive)
  - f) Priority Based Algorithm (Preemptive)