Cycle 3
CPU Scheduling Algorithms

Experiment No. 3.1
Aim : Implementation of FCFS and SJF scheduling algorithm

(1) Write a Menu driven program to implement FCFS and SJF CPU scheduling algorithm (Non Preemeptive). Read burst time from the user. Display the Gantt chart and compute the following.

a) Waiting time of each process.
b) Average waiting Time.
c) Turn Around Time of each process.
d) Average Turn Around Time.
e) Throughput.

Experiment No. 3.2
Aim : Implementation of SRTF scheduling algorithm

(2) Write a Program to implement SJF CPU Scheduling algorithm (both preemptive and non-preemptive) and calculate Average Waiting Time, Average Turn Around Time , Average Response Time and Throughput of the system.

Experiment No. 3.3
Aim : Implementation of priority scheduling algorithm

(3) Write a program to implement Priority Scheduling algorithm (Preemptive and Non-Preemptive). Read burst time, priority, arrival time and display the following.

a) Waiting time of each process.
b) Average waiting Time.
c) Turn Around Time of each process.
d) Average Turn Around Time.
e) Throughput and Gannt chart

Experiment No. 3.4
Aim : Implementation of round robin scheduling algorithm

(4) Write a Program to implement Round Robin Scheduling algorithm. Implement the program as a menu driven on the basis of time quantum (possible values of time quantums are : 2ms, 4ms, 5ms, 8ms and 10 ms). Display the Gantt chart and calculate Average Waiting Time, Average Turn Around Time and Throughput of the system in each case.