Implementation of CPU scheduling algorithms.

1. Write a Menu driven program to implement FCFS and SJF CPU scheduling algorithm (Non Preemeptive). Read burst 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.
2. Write a Program to implement Pre-emptive SJF CPU Scheduling algorithm and calculate Average Waiting Time, Average Turn Around Time and Throughput of the system.
3. Write a program to implement Priority Scheduling algorithm (Preemptive and Non-Pre-emptive). 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
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, 8ms and 10 ms) and calculate Average Waiting Time, Average Turn Around Time and Throughput of the the system in each case.