Instructions:

1. Make a word document with the convention "SECTION_ROLLNO _LAB-NO". In addition, paste all of your work done at the LINUX prompt.
2. You have to submit a Word File.

TASK 1

Consider the following set of processes, with the length of the CPU burst time given in milliseconds:

Process	Burst Time	Priority
P_1	3	2
P_2	1	1
P_3	7	4
P_4	4	2
P_5	5	3

The processes are assumed to have arrived in the order P1, P2, P3, P4, P5 all at time 0.

a. Implement the following scheduling algorithms in C/C++: FCFS, nonpreemptive SJF, nonpreemptive priority (a larger priority number implies a higher priority), and RR (quantum = 2).

b. What is the turnaround time of each process for each of the scheduling algorithms?

c. What is the waiting time of each process for each of these scheduling algorithms?

d. What is average turnaround time and average waiting time?

NOTE: Comment your code to make it understandable.

TASK 2

Consider the following set of processes

Process	Priority	Burst time	Arrival time
P1	1	4	0
P2	2	3	0
P3	1	7	6
P4	3	4	11
P5	2	2	12

a. Implement the following scheduling algorithm in C/C++: preemptive priority (a larger priority number implies a higher priority).

b. What is the turnaround time of each process for each of the scheduling algorithms?

c. What is the waiting time of each process for each of the scheduling algorithms?

d. What is average turnaround time and average waiting time?

NOTE: Comment your code to make it understandable.

TASK 3

Suppose that the following processes arrive for execution at the times indicated. Each process will run for the amount of time listed. In answering the questions, use nonpreemptive scheduling, and base all decisions on the information you have at the time the decision must be made.

Process	Arrival Time	Burst time
P_0	0	6
P_1	0.3	3
P_2	0.9	1

a. Implement the following scheduling algorithm in C/C++: preemptive SJF,

b. What is the turnaround time of each process for each of the scheduling algorithms?

c. What is the waiting time of each process for each of the scheduling algorithms?

d. What is average turnaround time and average waiting time?

NOTE: Comment your code to make it understandable.