WEEK 5 | DSE OS LAB
CPU SCHEDULING ALGORITHMS

Write a C program *(implement using modularization and C-style arrays)* to simulate the following CPU scheduling algorithms. Display Gantt chart showing the order of execution of each process. Compute waiting time and turnaround time for each process. Hence, compute average waiting time and average turnaround time.

(i) FCFS
(ii) SJF
(iii) SRTF
(iv) Round-Robin
(v) Non-preemptive priority
(vi) Preemptive priority

Validations:

a. Number of processes should not be zero
b. Process IDs should be non-negative

Sample Output Format:

Gantt Chart for the Algorithm

	P1	**P2**	**P3**
0	**24**	**27**	**30**

Process ID	Arrival Time	Burst Time	Completion Time/ Exit Time	Waiting Time	Turn Around Time
P1	0	24			
P2	0	3			
P3	0	3			

Average waiting time = 18.75 *(upto two digits after the decimal)*
Average turnaround time = 26.75

Note: One program for each scheduling algorithm