

Q1.

Consider the following set of processes, all of which arrive at **time 0**, with their corresponding **burst times**:

Pro	Burst Time
P1	8
P2	4
P3	9
P4	5

1. Using First-Come First-Serve (FCFS) Scheduling:

- Draw the Gantt chart
- Calculate the **Completion Time** and **Turnaround Time (TAT)** for each process
- Compute the **Average Turnaround Time**

2. Using Round Robin (RR) Scheduling with a Time Quantum of 3 units:

- Draw the Gantt chart showing process execution order (with repeated slices if needed)
- Calculate the **Completion Time** and **Turnaround Time (TAT)** for each process
- Compute the **Average Turnaround Time**

Q2.

Consider the following set of processes with their **arrival times** and **burst times (processing time)**:

Pro	Arrival Time	Burst Time
P1	0	8
P2	1	4
P3	2	9
P4	3	5

1. **Using Non-Preemptive Shortest Job First (SJF) (Ignore the Arrival Time, assume that all processes arrived at the same time):**
 - Draw the Gantt chart
 - Calculate the **Turnaround Time (TAT)** for each process
 - Compute the **Average Turnaround Time**
2. **Using Preemptive Shortest Remaining Time First (SRTF) (Consider the Arrival Time):**
 - Draw the Gantt chart (showing switching of processes)
 - Calculate the **Turnaround Time (TAT)** for each process
 - Compute the **Average Turnaround Time**