

1. Consider the following processes (times in ms):

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

Using Shortest Remaining Time First (SRTF) scheduling:

Required:

- Draw the Gantt chart.
- Compute each process's Completion Time (CT).
- Compute Turnaround Time ($TAT = CT - AT$) and Waiting Time ($WT = TAT - BT$).
- Find the Average Waiting Time and Average Turnaround Time.

Concept Reminder

- SRTF is the **preemptive version** of Shortest Job First.
- The **CPU always runs** the process with the **least remaining time** 🕒
- If a new process arrives with a shorter remaining burst → it **preempts** the current one.

2. Given:

Process	Arrival	Burst
P1	0	5
P2	2	3
P3	4	1

Required: Draw the Gantt chart, find WT, TAT, and average values using First Come, First Served (FCFS)

3. Given:

Process	Arrival	Burst
P1	0	6
P2	2	4
P3	4	2
P4	6	3

Required: Draw Gantt chart, calculate **WT**, **TAT**, **Averages** using Shortest Job First (SJF – Non-Preemptive)

4. Given:

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

Required: Draw Gantt chart, find WT, TAT, Averages Shortest Remaining Time First (SRTF – Preemptive SJF)

5. Given:

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

(Time Quantum = 4 ms)

Required: Draw Gantt chart, compute WT, TAT, Averages.

6. Given:

Process	Arrival	Burst	Priority (1 = highest)
P1	0	6	3
P2	1	2	1
P3	2	8	4
P4	3	3	2

Required: Draw Gantt chart, compute **WT**, **TAT**, **Averages**.

7. Given:

Process	Arrival	Burst	Priority (1 = highest)
P1	0	5	3
P2	1	4	1
P3	2	2	4
P4	3	1	2

Required: Gantt chart, **WT**, **TAT**, **Averages**.
