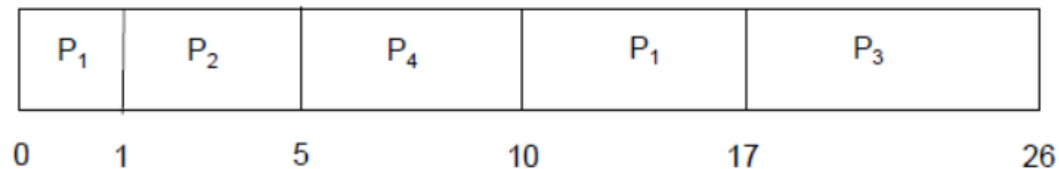


Topic 5: CPU Scheduling

Scheduling Algorithm: Shortest-Remaining-Time-First (SRTF)

Process	Arrival Time	Burst Time	Process	t = 0	t=1	t=2	t=3	t=5	t=10	t=17	t=26
P_1	0	8	P_1 AT = 0	8	7	7	7	7	7	0	0
P_2	1	4	P_2 AT = 1	4	4	3	2	0	0	0	0
P_3	2	9	P_3 AT = 2	9	9	9	9	9	9	9	0
P_4	3	5	P_4 AT = 3	5	5	5	5	5	0	0	0

Preemptive SJF Gantt Chart



Waiting time for

- ▶ $P_1 = (0 - 0) + (10 - 1) = 9$
- ▶ $P_2 = (1 - 1) = 0$
- ▶ $P_3 = (17 - 2) = 15$
- ▶ $P_4 = (5 - 3) = 2$

Average waiting time = $(9 + 0 + 15 + 2)/4 = 6.5$ msec