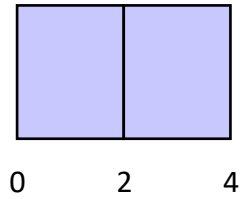
Problem Statement

- Processes with Arrival and Burst Times:
- P1: Arrival = 2, Burst = 6
- P2: Arrival = 5, Burst = 2
- P3: Arrival = 1, Burst = 8
- P4: Arrival = 0, Burst = 3
- P5: Arrival = 4, Burst = 4
- Time Slice: 2 Units

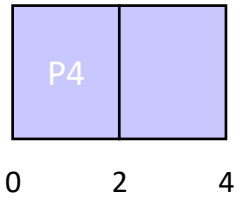
Process	Arrival Time	Burst Time
P1	2	6
P2	5	2
P3	1	8
P4	0	3
P5	4	4

Step 1 – Initialize Gantt chart



Step 2 - Execute P4

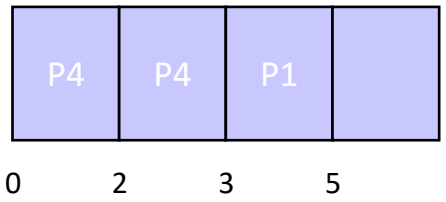
•Process P4: First 2 units → [0, 2]; Remaining 1 unit → [2, 3].
•Add P4 to the Gantt chart.



Step 3 - Execute P1

•Process P1: Arrival time 2 with burst time 6, executed fully → [3, 5].

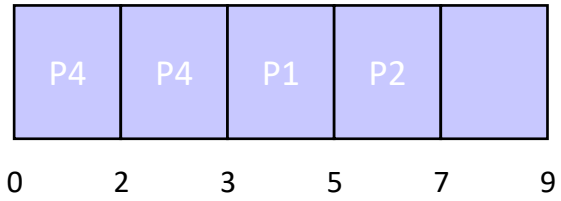
•Add P1 to the Gantt chart. Remaining Brust time is 4



Step 4 - Execute P2

•Process P2: , Arrival time 5 with Burst time 2→ [5, 7].

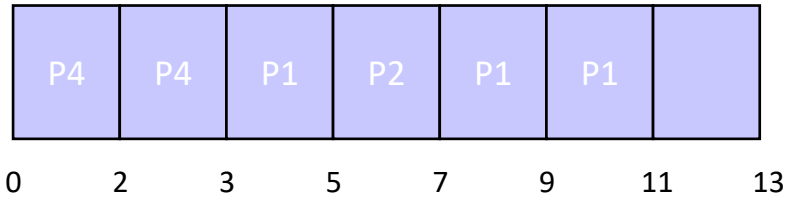
•Add P2 to the Gantt chart.



Step 5 - Execute P1

•Process P1: With remaining burst time 4, executed fully → [7, 9] and [9,11].

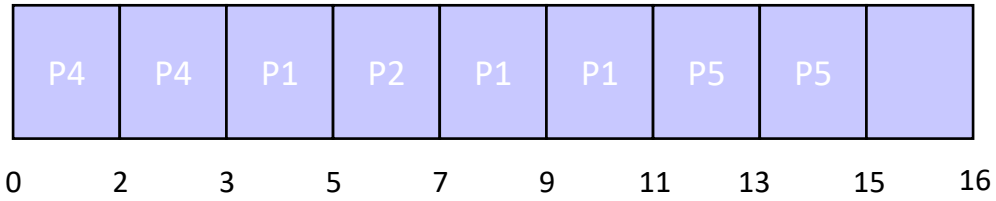
•Add P1 to the Gantt chart.



Step 6 - Execute P5

•Process P5: Arrival time is 4 with burst 4 , executed fully → [11, 13] and [13,15].

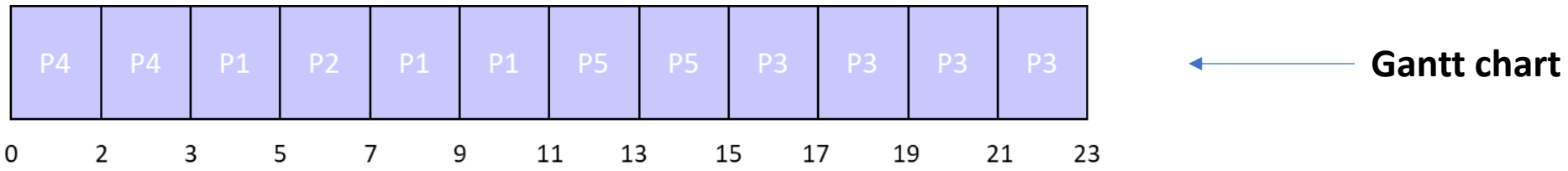
Add P2 to the Gantt chart.



Step 7- Execute P3

•Process P3:Arrival time is 1 with maximum burst time of 8 , executed fully → [15,23]

•Add P1 to the Gantt chart.



Waiting time

For each process:

•**P4**: TAT=3−0=3

•**P1**: TAT=11−2=9

•**P2**: TAT=7−5=2

•**P5**: TAT=15−4=11

•**P3**: TAT=23−1=22

Average TAT=Number of Processes/Sum of all TATs

=(3+9+2+11+22)/5=47/5

=9.4units

Turn-around time

For each process:

•**P4**: WT=3−3=0

•**P1**: WT=9−6=3

•**P2**: WT=2−2=0

•**P5**: WT=11−4=7

•**P3**: WT=22−8=14

Average WT=Number of Processes/Sum of all WTs

=0+3+0+7+14/5=24/5

=4.8units