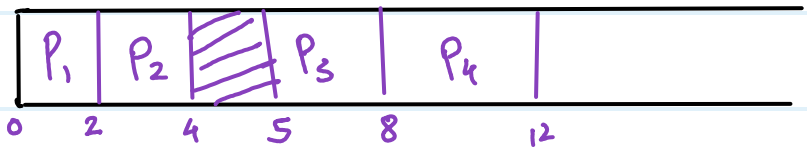
* FCFS

Process No.	Arrival Time	Burst Time	Completion Time	TAT	WT	RT
P_1	0	2	2	2	0	0
P_2	1	2	4	3	1	1
P_3	5	3	8	3	0	0
P_4	6	4	12	6	2	2

Gantt chart



TAT = CT − AT

TAT − BT = WT

RT = Time at a process got CPU first time − BT

Avg TAT $= \frac{14}{4} = 3.5$ msec

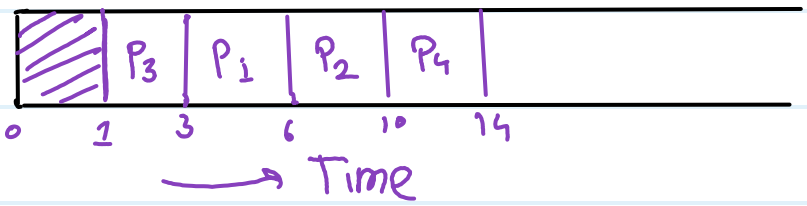
Avg WT $= \frac{3}{4} = 0.75$ msec

In Non-Premptive, RT = WT

* SJF

Process No.	Arrival Time	Burst Time	Completion Time	TAT	WT	RT
~~P_1~~	1	3	6	5	2	2
~~P_2~~	2	4	10	8	4	4
~~P_3~~	1	2	3	2	0	0
~~P_4~~	4	4	14	10	6	6

Gantt chart



Avg TAT = $25/4 = 6.25$ msec

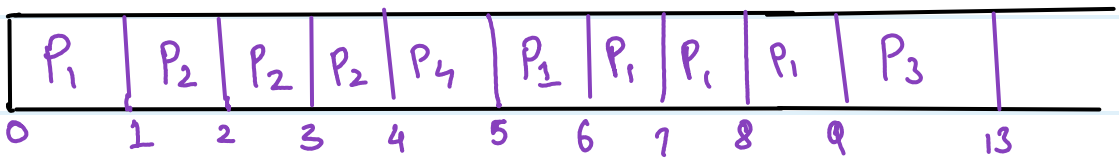
Avg WT = $10/4 = 3.0$ msec

* SRTF (SJF with Preemption)

Process No.	Arrival Time	Burst Time	Completion Time	TAT	WT	RT
~~P_1~~	0	~~5 4 3 2 1 0~~	9	9	4	0
~~P_2~~	1	~~3 2 1 0~~	4	3	0	0
~~P_3~~	2	~~4~~	13	11	7	7
~~P_4~~	4	~~1~~	5	1	0	0

Gantt chart

RT = { CPU first time − A



Avg TAT = 6

Avg WT = 2.75

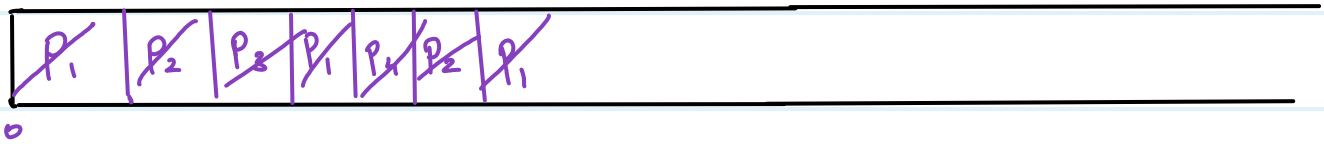
Avg RT = 1.45

* Round Robin (RR)

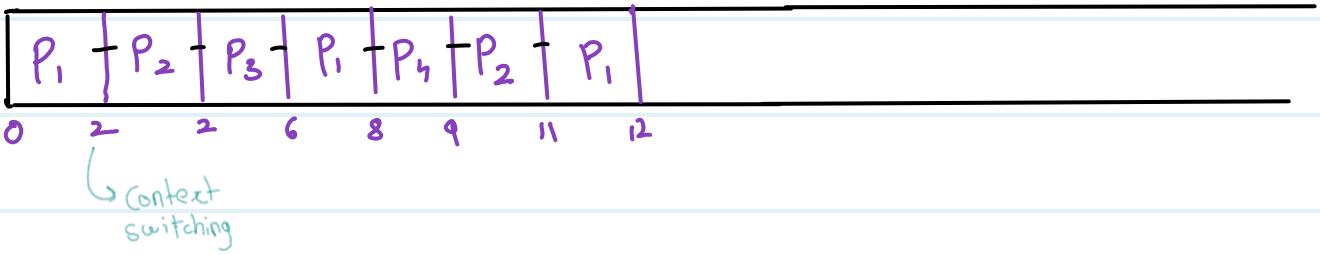
Process No.	Arrival Time	Burst Time	Completion Time	TAT	WT	RT
P_1	0	~~5~~ 3 1 0	12	12	7	0
P_2	1	~~4~~ 2 0	11	10	6	1
~~P_3~~	2	~~2~~ 0	6	4	2	2
~~P_4~~	4	~~1~~ 0	9	5	4	4

Time Quantum = 2

Ready Queue



Running Queue

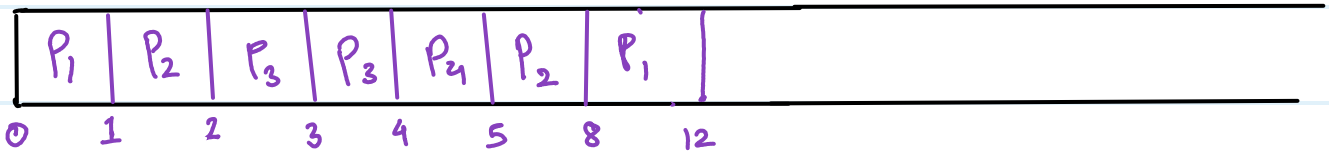


∴ 6 times context switching

* Priority Scheduling

Priority	Process No.	Arrival Time	Burst Time	Completion Time	TAT	WT
10	~~P_1~~	0	~~5~~ $_4$	12	12	7
20	~~P_2~~	1	~~1~~ $_3$	8	7	3
30	~~P_3~~	2	~~2~~ ~~1~~ $_0$	4	2	0
40	~~P_4~~	4	~~1~~ $_0$	5	1	0

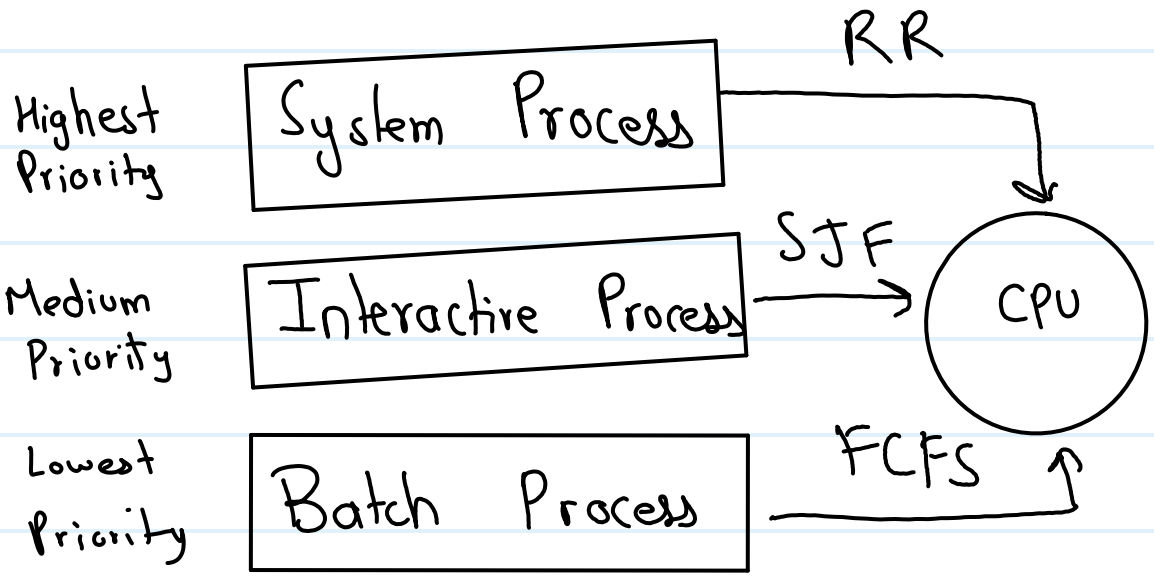
Higher the no.
Higher the priority



Avg TAT = 5.5 msec

Avg WT = 2.5 msec

* Multilevel Queue Scheduling



* Multilevel Feedback Queue Scheduling