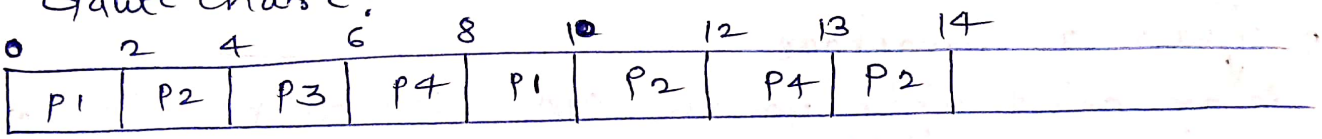
9. Consider the following Processes with arrival times and burst times, and the time quantum for ~~process~~ Round Robin Scheduling is 2 units:

Process	Arrival T.	Burst T.	Waiting Time	Turnaround T.
P1	0	4	6	10
P2	1	5	8	13
P3	2	2	2	4
P4	3	3	7	10

⇒ Gault chart:



Avg. Turnaround Time = $\frac{10+13+4+10}{4}$

$= 37/4$

$= 9.25$

Part E

Q. 1. Consider the following processes with arrival times and burst times:

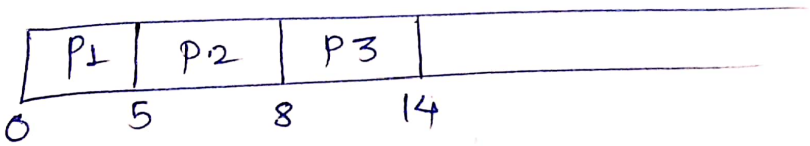
Process	Arrival Time	Burst Time
P1	0	5
P2	1	3
P3	2	6

calculate the average waiting time using First-come, First served (FCFS) scheduling:

⟹ Ans.

Process	Arrival Time	Burst T.	Response T.	Waiting T	TAT
P1	0	5	0	0-0=0	
P2	1	3	5	5-1=4	
P3	2	6	8	8-2=6	

Gantt chart



∴ average Waiting Time $= \frac{0+4+6}{3}$

$= \frac{10}{3}$

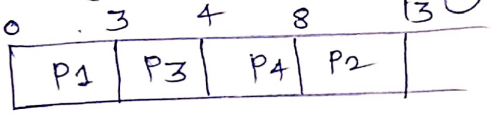
$= 3.3$

Q.2. Consider the following processes with arrival times and burst times.

Process	Arrival T.	Burst T.	Response T.	Waiting T.	TAT
P1	0	3	0	0	3
P2	1	5	8	7	12
P3	2	1	3	1	2
P4	3	4	4	1	5

calculate the average turnaround time using shortest Job First (SJF) scheduling.

⇒ Gault chart.



Avg. Turnaround Time = $\frac{3+12+2+5}{4}$

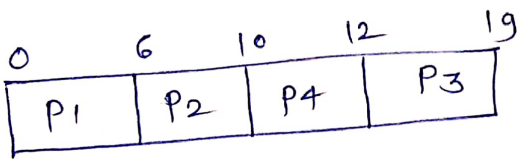
$= \frac{22}{4} = \underline{\underline{5.5}}$

Q.3. Consider the following processes with arrival time, burst times, and priorities (lower number indicates higher priorit

Process	Arrival T.	Burst T.	Priority	Waiting Time
P1	0	6	3	0
P2	1	4	1	5
P3	2	7	4	10
P4	3	2	2	7

Calculate the avg. waiting time using priority scheduling:

Ans ⇒ Gautt chart:



Avg. waiting Time = $\frac{0+5+10+7}{4}$

$= \frac{22}{4}$

$= 5.5$