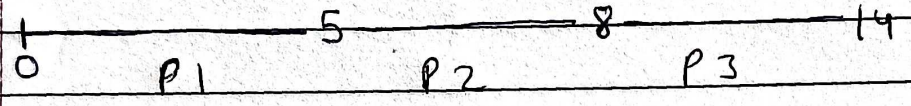
Part E

Q1. 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 FCFS scheduling.

Sol



	CT	Waiting time
P1	5	0
P2	8	4
P3	14	6

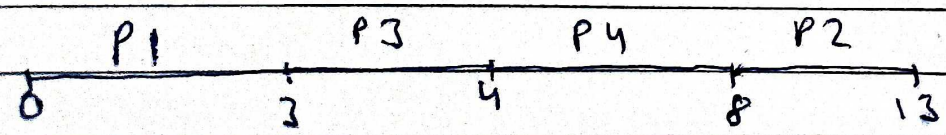
Ans Av = 3.33

Q2. Calculate the average turnaround time using shortest job first scheduling.

Process	Arrival time	B.T	C.T.	W.T.	TAT
P1	0	3	3	0	3
P2	1	5	13	7	12
P3	2	1	4	1	2
P4	3	4	8	1	5

22/4 = 5.5

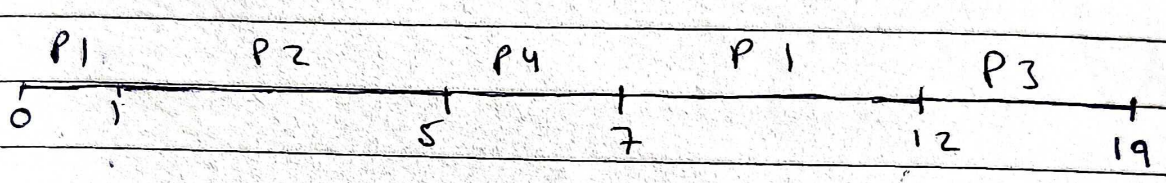
Sol



Average TAT is 5.5

Q3. Calculate the average waiting time using Priority Scheduling (Lower no. indicates higher priority).

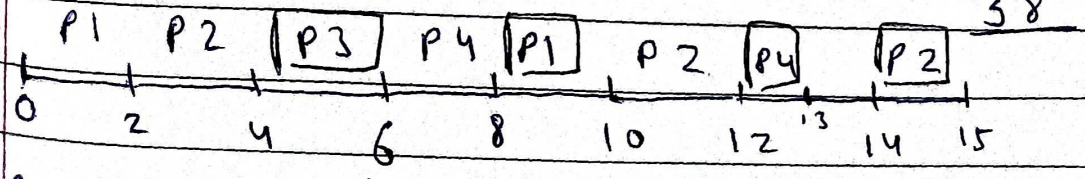
P	A.T	B.T	Priority	C.T	W.T
P1	0	6	3	12	7
P2	1	4	1	5	0
P3	2	7	4	19	10
P4	3	2	2	7	2



Av. W.T = 7+0+10+2/4 = 19/4 = 4.75

Q4. Consider the following process with A.T. and B.T, and the time quantum for Round Robin scheduling is 2 units: Calculate the average TAT using R.R. scheduling.

P	A.T.	B.T	C.T.	TAT
P1	0	4	10	10-0=10
P2	1	5	15	15-1=14
P3	2	2	6	6-2=4
P4	3	3	13	13-3=10
				38



Ans Avg. TAT = 38/4 = 9.5