Ques 1.a

```
3_Ques1
Enter the number of processes: 6
Enter arrival time of process 1: 0
Enter burst time of process 1: 3
Enter priority of the process 1: 6

Enter arrival time of process 2: 0
Enter burst time of process 2: 7
Enter priority of the process 2: 5

Enter arrival time of process 3: 0
Enter burst time of process 3: 2
Enter priority of the process 3: 2

Enter arrival time of process 4: 0
Enter burst time of process 4: 4
Enter priority of the process 4: 3

Enter arrival time of process 5: 0
Enter burst time of process 5: 9
Enter priority of the process 5: 7

Enter arrival time of process 6: 0
Enter burst time of process 6: 1
Enter priority of the process 6: 4
```

#P	AT	BT	PRI	CT	TAT	WT
1	0	3	6	12	12	9
2	0	7	5	19	19	12
3	0	2	2	26	26	24
4	0	4	3	24	24	20
5	0	9	7	9	9	0
6	0	1	4	20	20	19

```
Average Turnaround Time = 18.33
Average Waiting Time = 14.00
```

Ques 1.b

```
D:\SEMESTER 5\Operating Systems\Lab-3>cd "d:\SEMESTER 5\Operating System
3_Ques1
Enter the number of processes: 6
Enter arrival time of process 1: 1
Enter burst time of process 1: 3
Enter priority of the process 1: 3

Enter arrival time of process 2: 2
Enter burst time of process 2: 4
Enter priority of the process 2: 2

Enter arrival time of process 3: 2
Enter burst time of process 3: 5
Enter priority of the process 3: 1

Enter arrival time of process 4: 3
Enter burst time of process 4: 6
Enter priority of the process 4: 5

Enter arrival time of process 5: 3
Enter burst time of process 5: 4
Enter priority of the process 5: 6

Enter arrival time of process 6: 4
Enter burst time of process 6: 3
Enter priority of the process 6: 5
```

#P	AT	BT	PRI	CT	TAT	WT
1	1	3	3	17	16	13
2	2	4	2	21	19	15
3	2	5	1	26	24	19
4	3	6	5	13	10	4
5	3	4	6	7	4	0
6	4	3	5	16	12	9

```
Average Turnaround Time = 14.17
Average Waiting Time = 10.00
```

Ques 2.a

```
D:\SEMESTER 5\Operating Systems\Lab-3>cd "d:\SEMESTER 5\Operating Systems
_Lab3_Ques2.a
Enter the number of processes: 6
Enter time quantum: 3
Enter arrival time of process 1: 0
Enter burst time of process 1: 3

Enter arrival time of process 2: 0
Enter burst time of process 2: 6

Enter arrival time of process 3: 0
Enter burst time of process 3: 12

Enter arrival time of process 4: 0
Enter burst time of process 4: 4

Enter arrival time of process 5: 0
Enter burst time of process 5: 1

Enter arrival time of process 6: 0
Enter burst time of process 6: 5


Pid     AT      BT      CT      TAT     WT

1       0       3       3       3       0

2       0       6       19      19      13

3       0       12      31      31      19

4       0       4       23      23      19

5       0       1       13      13      12

6       0       5       25      25      20

Average Turnaround Time = 19.00
Average Waiting Time = 13.83
```

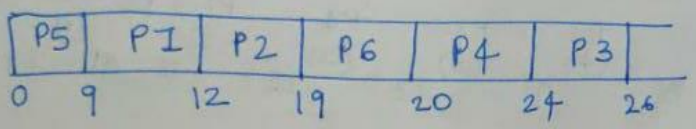
Ques 2.b

```
D:\SEMESTER 5\Operating Systems\Lab-3>cd "d:\SEMESTER 5\Operating Systems\Lab-3\" && g++ C
ED19I056_Lab3_Ques2.b.cpp -o CED19I056_Lab3_Ques2.b && "d:\SEMESTER 5\Operating Systems\La
b-3\"CED19I056_Lab3_Ques2.b
Enter the number of processes: 6
Enter time quantum: 2
Enter arrival time of process 1: 0
Enter burst time of process 1: 4

Enter arrival time of process 2: 1
Enter burst time of process 2: 5

Enter arrival time of process 3: 2
Enter burst time of process 3: 2

Enter arrival time of process 4: 3
Enter burst time of process 4: 1

Enter arrival time of process 5: 4
Enter burst time of process 5: 6

Enter arrival time of process 6: 6
Enter burst time of process 6: 3


Pid     AT      BT      CT      TAT     WT

1       0       4       8       8       4

2       1       5       18      17      12

3       2       2       6       4       2

4       3       1       9       6       5

5       4       6       21      17      11

6       6       3       19      13      10

Average Turnaround Time = 10.83
Average Waiting Time = 7.33
```

Lab-3 Priority based scheduling (Preemptive) CED19I054 M. Nandita

1) All processes arrive at 0.

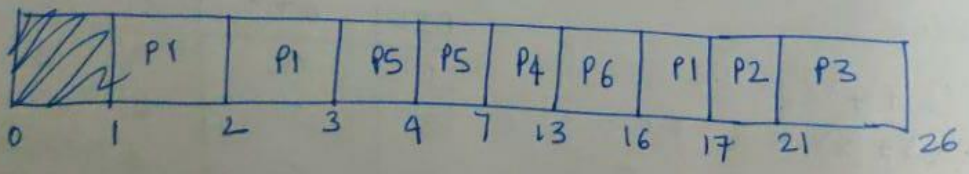
PID	AT	BT	Priority	CT	TAT	WT
1	0	3	6	12	12	9
2	0	7	5	19	19	12
3	0	2	2	26	26	24
4	0	4	3	24	24	20
5	0	9	7	9	9	0
6	0	1	4	20	20	19.



Avg TAT = 18.33
Avg WT = 14.

b) Processes arrive at different times

Pid	AT	BT	Priority	CT	TAT	WT
1	1	3	3	17	16	13
2	2	4	2	21	19	15
3	2	5	1	26	24	19
4	3	6	5	13	10	4
5	3	4	6	7	4	0
6	4	3	5	16	12	9



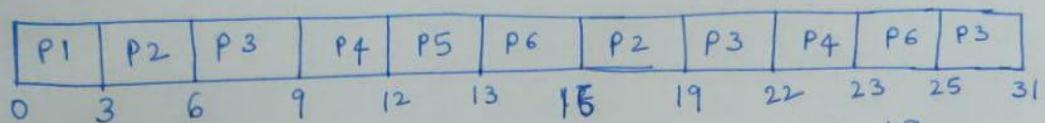
Avg TAT = 14.17
Avg WT = 10.

CED19IOS6
M.Nandita.

2) Round robin scheduling.

a) All arrive at time 0. Time Quantum = 3

PID	AT	BT	CT	TAT	WT
1	0	3	3	3	0
2	0	6	19	19	13
3	0	12	31	31	19
4	0	4	23	23	19
5	0	1	13	13	12
6	0	5	25	25	20.

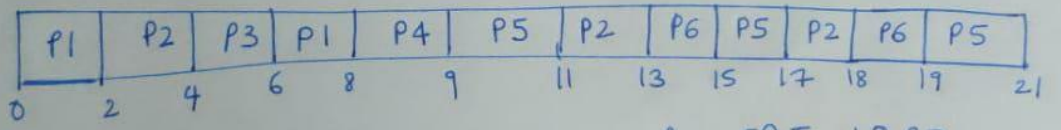


Avg TAT = 19

Avg WT = 13.83.

b) Arrive at different times. Time quantum = 2

PID	AT	BT	CT	TAT	WT
1	0	4	8	8	4
2	1	5	18	17	12
3	2	2	6	4	2
4	3	1	9	6	5
5	4	6	21	17	11
6	6	3	19	13	10.



Avg TAT = 10.83

Avg WT = 7.33.