EXERCISE-1

Qeustion 1. For the process listed in table draw the chart illustrating their execution time using

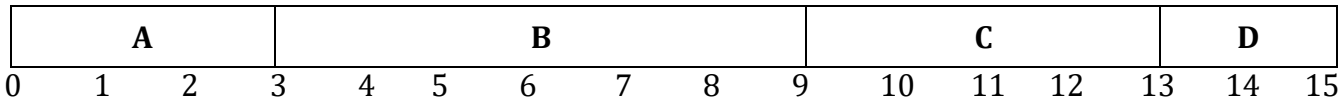
A. First-Come- First –Served.
B. Shortest Job First(SJF Non Preempted)

Table 1: Process Scheduling Data

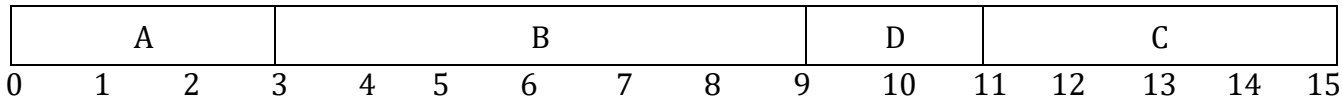
Process	Arrival Time	Burst Time/ Processing Time
A	0.000	3
B	1.001	6
C	4.001	4
D	6.001	2

Solution

A. First-Come- First –Served.



B. Shortest Job First(SJF Non Preempted)



Qeustion 2. For the process listed in Table 1, calculate the turnaround time of each process and also calculates average turnaround time using.

A. First-Come- First –Served.
B. Shortest Job First(SJF Non Preempted)
C. Shortest Remaining Time First(SJF Preempted)
D. Round Robin (Quantum =2)
E. Round Robin (Quantum =1)

(Hint: Turnaround time is computed by subtracting the time the process entered in the system from the time it terminated)

Solution

A. First-Come- First –Served.

Tat (A) = (3) – (0) = (3)
Tat (B) = (9) – (1) = (8)
Tat (C) = (13) – (4) = (9)
Tat (D) = (15) – (6) = (9)

B. Shortest Job First(SJF Non Preempted)

Tat (A) = (3) – (0) = (3)
Tat (B) = (9) – (1) = (8)
Tat (C) = (15) – (4) = (11)
Tat (D) = (11) – (6) = (5)

Qeustion 3. For the process listed in Table 1, calculate the waiting time of each process and also calculates average waiting time using.

A. First-Come- First –Served.
B. Shortest Job First(SJF Non Preempted)

(Hint: Waiting time is computed by subtracting the Processing time(Burst Time)from its Turnaround time)

Solution

A. First-Come- First –Served.

W (A) = (3) – (3) = (0)
W (B) = (8) – (6) = (2)
W (C) = (9) – (4) = (5)
W (D) = (9) – (2) = (7)

B. Shortest Job First(SJF Non Preempted)

W (A) = (3) – (3) = (0)
W (B) = (8) – (6) = (2)
W (C) = (11) – (4) = (7)
W (D) = (5) – (2) = (3)

SUMMARY

	Process	Arrival Time	Burst Time/ Processing Time	Execution Time	Turnaround Time	Waiting Time	Average Turnaround Time	Average waiting Time
FCFS	**A**	0.000	3	**3**	**3**	**0**	**7.25**	**3.5**
	B	1.001	6	**9**	**8**	**2**		
	C	4.001	4	**13**	**9**	**5**		
	D	6.001	2	**15**	**9**	**7**		
SJF (NP)	**A**	0.000	3	**3**	**3**	**0**	**6.75**	**3**
	B	1.001	6	**9**	**8**	**2**		
	C	4.001	4	**15**	**11**	**7**		
	D	6.001	2	**11**	**5**	**3**		