Green University

Mid Exam Assessment

Course Title: Operating System

Course Code: CSE 309

Section: PC DA

Submitted to

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Ans the following Question

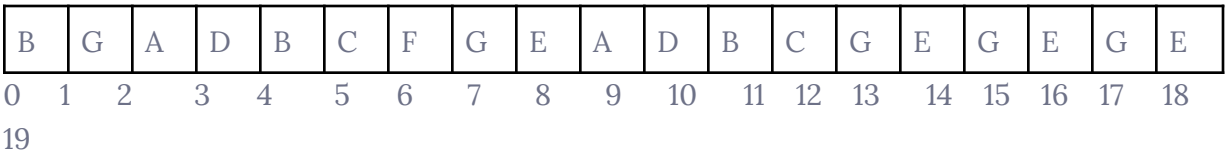
SJF:

Gantt chart

Job	Arrival Time	Burst Time	Finish Time	Turnaround Time	Waiting Time
B	0	3	3	3	0
G	0	5	19	19	14
A	1	2	6	5	3
D	1	2	8	7	5
C	2	2	10	8	6
F	2	1	4	2	1
E	3	4	14	11	7
			Average	55 / 7 = 7.857	36 / 7 = 5.143

RR:

Gantt Chart



Job	Arrival Time	Burst Time	Finish Time	Turnaround Time	Waiting Time
B	0	3	12	12	9
G	0	5	18	18	13
A	1	2	10	9	7
D	1	2	11	10	8
C	2	2	13	11	9
F	2	1	7	5	4
E	3	4	19	16	12
			Average	81 / 7 = 11.571	62 / 7 = 8.857

SJF VS RR

SJF

- It is associated with each job as a unit of time to complete.
- This algorithm method is helpful for batch-type processing, were waiting for jobs to complete is not critical.
- It can improve process throughput by making sure that shorter jobs are executed first, hence possibly having a short turnaround time.
- It improves job output by offering shorter jobs, which should be executed first, which mostly have a shorter turnaround time.

RR

- A preemptive scheduling algorithm.
- CPU shifts to the next process after a fixed time interval known as time quantum or time-slice.
- Preempted processes are added to the end of the queue.
- A hybrid and clock-driven model.
- Time slice is usually the minimum but differs from OS to OS.
- When a process executes for a specific time, it is preempted, and another process takes its place executing for that same time period.