Comp 3711 A4

Mengyang Zhang

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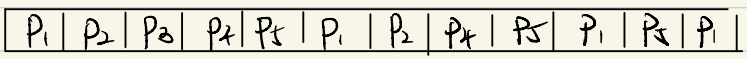
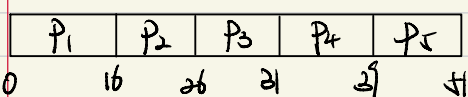
Q1:



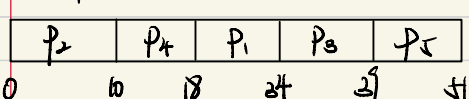
Round Robin

process	turnaround time	wait time
P_1	51	35
P_2	25	25
P_3	12	7
P_4	33	25
P_5	42	30



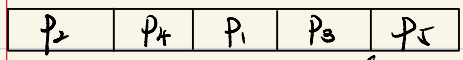
First come first serve

process	turnaround time	wait time
P_1	16	0
P_2	26	16
P_3	28	23
P_4	34	26
P_5	42	31



Priority preemptive

process	turnaround time	wait time
P_1	34	18
P_2	10	0
P_3	30	31
P_4	19	5
P_5	42	31

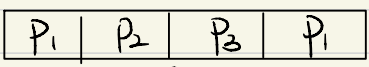


non - preemptive

0 10 18 24 29 41

process	turnaround time	wait time
P_1	34	18
P_2	10	0
P_3	30	31
P_4	19	14
P_5	42	31

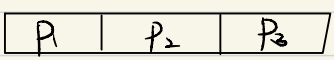
Q2:



Round Robin

0 5 9 10 13

process	turnaround time	wait time
P_1	13	14
P_2	9	14
P_3	6	14



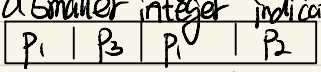
First come first serve

0 turnaround time 13

wait time

P_1	8	0
P_2	12	8
P_3	9	8

The CPU is allocated to the process with the highest priority (smallest integer = highest priority a) preemptive b) Nonpreemptive a smaller integer indicates a higher priority.

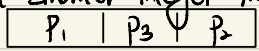


priority preemptive

0 4 5 9 13

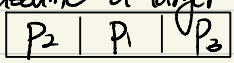
process	turnaround time	wait time
P_1	9	1
P_2	13	9
P_3	1	0

a smaller integer indicates a higher priority



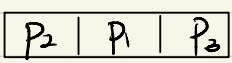
process	turnaround time	wait time
P_1	8	0
P_2	13	9
P_3	5	4

assume a larger integer indicates a higher priority



priority preemptive

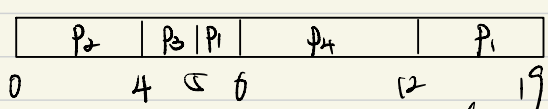
process	turnaround time	wait time
P_1	12	4
P_2	4	0
P_3	9	8



priority non-preemptive

process	turnaround time	wait time
P_1	12	4
P_2	4	0
P_3	9	8

Q3:



process	turnaround time	wait time
P_1	19	11
P_2	4	0
P_3	1	0
P_4	6	0

Q4

Shortest job first, shortest remaining time first and priority could result in starvation.

Shortest job first associate with each process the length of its next cpu burst, and use these lengths to schedule the process with the shortest time. Thus, processes with short time may never execute .

Shortest remaining time first based on shortest job first, we add the concepts of varying s and preemption to the analysis .

Thus , processes with short time may never execute.

Priority a priority number is associated with each process . The cpu is allocated to the process with the highest priority. Thus , low priority processes may never execute.

iii, iv, and v could result in starvation.

Shortest job first and shortest remaining time first.

Processes with short time may never execute.

Priority low priority processes may never execute.