

Home Exercise-3

Q1.

Task	Time Msec	Priority	Transition
T1	503	50	Comp
T2	500	100	Comp
T3	250	120	Blocked
T4	500	150	Preemption
T3	250	120	Comp
T4	Forever	150	Forever

Q2
.2.1

Task	Time Msec	Priority	Transition	a
T1	3	50	Comp	0
T4	1	80	Comp	80
T2	100	100	Forever	180

A=180. Task 2 has a bigger priority then Task 3. In preemption method the Task that has a bigger priority will be in the running state on the CPU and Won't let go to Tasks that are in lower priority.

2.2

Task	Time Msec	Priority	Transition	a
T1	3	50	Comp	0
T4	1	80	Comp	80
T2	Time Slice	100	Round robin	180
T3	Time Slice	100	Round robin	280

A=280. Task 2 and Task 3 will both run on the CPU, each task in his own Slice time. Round Robin allow all tasks that have the same priority to run On the CPU in a time that was defined before the program was execute.

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2.3.a Preemption

Task	Time Msec	Priority	Transition	A
T1	3	50	Comp	0
T2	Forever	100	Forever	100

2.3.b Round Robin

Task	Time Msec	Priority	Transition	A
T1	3	50	Comp	0
T2	Time Slice	100	Round robin	100
T3	Time Slice	100	Round robin	200

Task 4 will not be able to get into running state in either case. In preemption method Task 2 will take the CPU and won't let go anytime.

In Round Robin

Method Task 2 and Task 3 would always run on the CPU one at a time, each

Task in his slice time.

Q3.

Task	Time Msec	Priority	Transition
T1	1	150	Create T2
T2	500	100	Comp
T1	1	150	Create T3
T3	250	120	Blocked
T1	1	150	Create T4
T4	499	140	preemption
T3	250	120	Comp
T4	251	140	Comp
T1	Forever	150	While(1)

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