

Quiz Six of Operating System

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Name: _____ Student ID: _____

Question 1: Consider the following set of processes, with the length of the CPU burst given in milliseconds:

<u>Process</u>	<u>Burst Time</u>	<u>Priority</u>
P_1	2	2
P_2	1	1
P_3	8	4
P_4	4	2
P_5	5	3

The processes are assumed to have arrived in the order P_1, P_2, P_3, P_4, P_5 , all at time 0.

- Draw four Gantt charts that illustrate the execution of these processes using the following scheduling algorithms: FCFS, SJF, non-preemptive priority (a larger priority number implies a higher priority), and RR (quantum=2).
- Which of the algorithms results in the minimum average waiting time (over all processes)?

Answer:

Question 2: Explain the differences in how much the following scheduling algorithms discriminate in favor of short processes:

- FCFS
- RR
- Multilevel feedback queues

Answer:

Question 3: Consider a system implementing multilevel queue scheduling. What strategy can a computer user employ to maximize the amount of CPU time allocated to the user's process?

Answer: