Quiz Submissions - Homework 2

Daniel Davis (username: DanielDavis.dkd6)

Attempt 1

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Submission View

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Question 1 **0.5 / 0.5 points**

Consider First-Come, first-Served (FCFS) scheduling. Enter each process name (refer to the homework) in order of execution. ___P1___ ✓ (25 %) , ___P2___ ✓ (25 %) , ___P3___ ✓ (25 %) , ___P4___ ✓ (25 %)

Question 2 **0.5 / 0.5 points**

Consider Non-preemptive Shortest-Job-First (SJF) scheduling. Enter each process name (refer to the homework) in order of execution. ___P1___ ✓ (25 %) , ___P3___ ✓ (25 %) , ___P4___ ✓ (25 %) , ___P2___ ✓ (25 %)

Question 3 **0.5 / 0.5 points**

Consider Non-preemptive Priority Scheduling. Enter each process name (refer to the homework) in order of execution. ___P1___ ✓ (25 %) , ___P4___ ✓ (25 %) , ___P2___ ✓ (25 %) , ___P3___ ✓ (25 %)

Question 4 **0.5 / 0.5 points**

Consider Round-Robin scheduling with a time quantum of 10 ticks. Enter a list of comma separated process names (refer to the home work) in order of execution. (example: P1,P2, ...) ___P1,P2,P3,P4,P1,P2,P4,P1,P2___ ✓

Question 5 **0.75 / 0.75 points**

What is the average response time for First-Come, First-Served (FCFS) scheduling?

Answer: 31.25 ✓

Question 6 **0.75 / 0.75 points**

What is the average turn-around time for First-Come, First-Served (FCFS) scheduling?

Answer: 50 ✓

Question 7 **0.75 / 0.75 points**

What is the average response time for non-preemptive Shortest-Job-First (SJF)

Answer: 21.25 ✓

Question 8 **0.75 / 0.75 points**

What is the average turn-around time for non-preemptive Shortest-Job-First (SJF) scheduling?

Answer: 40 ✓

Question 9 **0.75 / 0.75 points**

What is the average response time for non-preemptive priority scheduling?

Answer: 30 ✓

Question 10 **0.75 / 0.75 points**

What is the average turn-around time for non-preemptive priority scheduling?

Answer: 48.75 ✓

Question 11 **0.75 / 0.75 points**

What is the average response time for Round-Robin scheduling with a time quantum of 10 ticks?

Answer: 10 ✓

Question 12 **0.75 / 0.75 points**

What is the average turn-around time for Round-Robin scheduling with a time quantum of 10 ticks?

Answer: 56.75 ✓

Question 13 **2 / 2 points**

Which of the following scheduling algorithms could result in starvation? Check all that apply.

- ✓ ☐ First-Come, First-Served (FCFS)

- ✔ ☑ Shortest-Job First
- ✔ ☑ Multi-Level Feedback Queue
- ✔ ☑ Priority

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This scheduling algorithm can cause starvation. Consider one long process P1(10000ms) and P2(10ms). Imagine if the computer called suddenly for 1000000 of P2. P1 would not receive a time slice until its own burst time passed at least 1000 times. This only assumes that no other process enters the queue.

Even though all processes eventually default to round robin, this algorithm can still cause starvation. Consider what happens if high priority processes are called and called and called forever... the computer would never get to any of the other processes that were all ready in the queue at a diminished priority.

This algorithm can cause starvation. imagine one process that is of low priority and two of high priority. the two high priority processes are fighting for processor time while the low priority process is never gaining access until the high priority processes terminate. The concept of aging may be applied to lower the priority of processes that keep getting selected by the scheduler.

Attempt Score: 10 / 10

Overall Grade (highest attempt)**:** 10 / 10

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