Assignment 5

The due date for submitting the assignment is over.

An extra credit you have not submitted this assignment.

<table>
<thead>
<tr>
<th>Number</th>
<th>AT</th>
<th>BT</th>
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</thead>
<tbody>
<tr>
<td>P1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>P2</td>
<td>1</td>
<td>6</td>
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<tr>
<td>P3</td>
<td>2</td>
<td>5</td>
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<tr>
<td>P4</td>
<td>3</td>
<td>3</td>
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<tr>
<td>P5</td>
<td>4</td>
<td>1</td>
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</tbody>
</table>

The first three jobs (P2, P3, and P4) are based on the above table.

1) The average turnaround time with the shortest remaining time first (SRTF) and shortest job first (SJF) scheduling for the seven processes listed in the table is __________.

   13 and 13.6
   17 and 15.8
   17 and 13.4
   13 and 13.4
   11 and 7
   11 and 5
   13 and 7

No, the answer is incorrect.

Answer:

13 and 13.6

2) Consider the context-switching overhead of 1 ms. What is the context-switching overhead while using EDF and SJF scheduling for the seven processes listed in the table above? Include the context-switching load in the first process?

   17 and 13.6
   11 and 7
   11 and 5
   13 and 7

No, the answer is incorrect.

Answer:

17 and 13.6

3) For the processes listed in the table above, the schedule length is __________ with a FCFS scheduling scheme.

No, the answer is incorrect.

Answer:

4 point

Consider 5 processes that start simultaneously. Each process takes 50 ms, 25 ms, and 10 ms, respectively. Out of this, the first 20% of the time is spent waiting for I/O events and the next 80% time for computation.

4) The schedule uses FCFS scheduling, assuming that all I/O operations are overlapped. How much time will in-nodes wait as the CPU idles?

   40 ms
   18 ms
   13 ms
   23 ms

No, the answer is incorrect.

Answer:

40 ms

5) From the data given above, which of the following is the average turnaround time considering only the time when a process is either running or in its sleep state and ready to run?

   40 ms
   13 ms
   23 ms
   73 ms

No, the answer is incorrect.

Answer:

40 ms

6) For the data given above, the schedule length is __________ assuming SJF scheduling algorithm.

No, the answer is incorrect.

Answer:

12 point

Consider five processes P1, P2, P3, and P4 with arrival time 0, 1, 2, 3, and burst time 3, 2, 1, and 4, respectively, what is the order of completion in SJF and RM scheduling with time slice of 2.

7) Order of completion in SJF scheduling

   P1, P3, P2, P4
   P1, P2, P3, P4
   P1, P2, P3, P4
   P1, P2, P3, P4

No, the answer is incorrect.

Answer:

P1, P2, P3, P4

8) Order of completion in RM scheduling

   P1, P2, P3, P4
   P1, P2, P3, P4
   P1, P2, P3, P4
   P1, P2, P3, P4

No, the answer is incorrect.

Answer:

P1, P2, P3, P4

9) Peterson's method to allocate resources in scheduling algorithms. Under the new scheme, processes get a priority number. The priority of the process is considered to be the scheduling algorithm using scheduling. The new scheme will allocate resources.

   True
   False

No, the answer is incorrect.

Answer:

True

10) Peterson's method to allocate resources in scheduling algorithms. Under the new scheme, processors get a priority number. The priority of the process is considered to be the scheduling algorithm using scheduling. The new scheme will allocate resources.

   True
   False

No, the answer is incorrect.

Answer:

True