



Online Exams

Sri Lanka Institute of Information Technology

Question 4

Not yet answered
Marked out of 1.0
 Remove flag

Given the following set of processes with their arrival times and burst times.

Process	Arrival time in milliseconds	Burst time in milliseconds
A	6.4 - 3.2	0
B		3
C	5	2
D	7	3

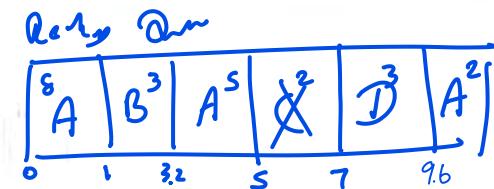
Use round-robin (quantum = 3 milliseconds) scheduling considering the context switching time as 0.2 milliseconds.

Compute the average waiting time.

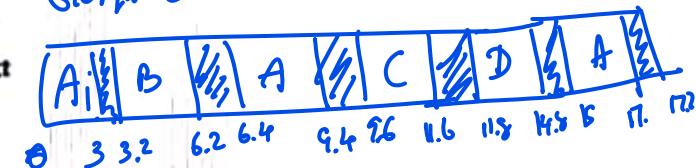
$$(6.4 - 3.2) + (15.0 - 9.6) \\ 3.2 \quad 5.4$$

Select one:

- a. 5.51ms
- b. 5.15ms
- c. 20.6ms
- d. 9.0ms
- e. 4.8ms



Gantt chart



$$\begin{aligned} & 8.6 \\ & (3.2 - 1) \rightarrow 2.2 \\ & (9.6 - 5) \rightarrow 4.6 \\ & (11.8 - 7) \rightarrow 4.8 \end{aligned}$$

$$\text{Avg} = \frac{20.2}{4} \\ \approx 5.05$$



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Question 32

Not yet answered

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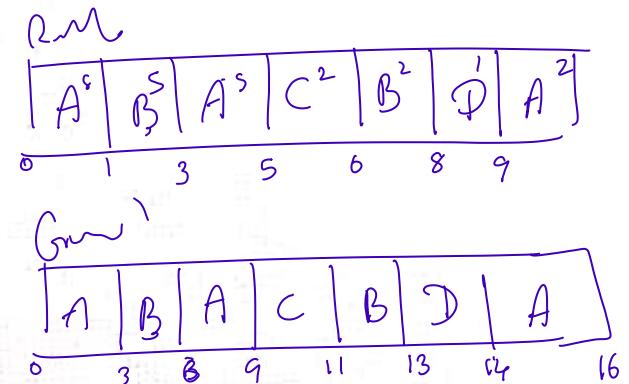
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Given the following set of processes with their arrival times and burst times, compute the average waiting time for processes for the round robin (quantum = 3) scheduling.

Process	Arrival time	Burst time
A	0	8
B	1	5
C	5	2
D	8	1

Select one:

- a. 8 seconds
- b. 4 seconds
- c. 6 seconds
- d. 24 seconds
- e. None of the above



$$\begin{aligned}
 A &\rightarrow (0-0) + (6-3) + (14-9) = 8 \\
 B &\rightarrow (3-1) + (11-6) = 7 \\
 C &\rightarrow (9-5) = 4 \\
 D &\rightarrow (13-8) = 5 \\
 \hline
 \text{Average} &= \frac{24}{4} = 6
 \end{aligned}$$



Question 36

Not yet answered

Marked out of 1.0

Flag question

How many child processes are created when the program is executed?

Assume variables *i* and *pid*, have been properly defined, and/or initialized and there is no syntax error.

```
int main () {  
    for(i =0; i <=5; i++) {  
        pid=fork ();  
        if pid==0{  
            return 0;  
        }  
    }  
}
```

$$\begin{aligned}2^5 - 1 \\ 32 - 1 = 31\end{aligned}$$

Select one:

- a. 32
- b. 4
- c. 5
- d. 6
- e. 31

$$2^5 - 1 = 31$$

Quiz navigation

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[Finish attempt ...](#)

Time left 0:12:37

How many child processes are created when the program is executed?

Assume variables have been properly defined, and/or initialized and there is \rightarrow syntax error

```
int main () {  
    fork ();  
    fork ();  
}
```

$$2^2 - 1 = 3$$

↑

Select one:

- a. 3
- b. 8
- c. 7
- d. 16
- e. 15

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Question 27

Not yet answered

Marked out of 1.0

Flag question

Consider the following statements regarding the processes scheduling:

a) ✓ Short term scheduler is faster than the medium term scheduler. CORRECT

b) ✗ Context switching between kernel level threads are faster than the user level threads. WRONG

c) ✗ Ready queue is implemented with first in first out policy. NOT SURE

Select one:

- a. Only a) is correct.
- b. Only b) is correct.
- c. Only b) and c) are correct.
- d. All are correct
- e. None of the above



Question 9

Not yet answered

Marked out of 1.0

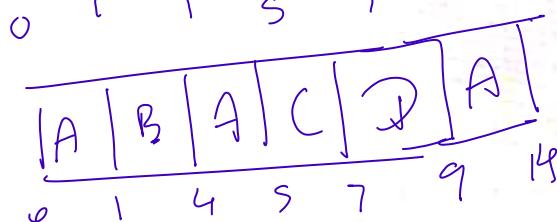
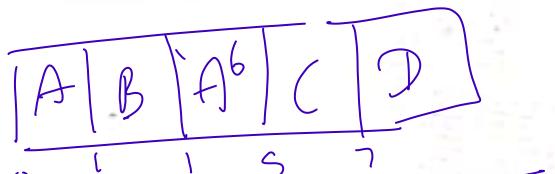
Flag question

Select the most correct average turnaround time for preemptive shortest job first scheduling.

Process	Arrival time	Burst time
A	0	7
B	1	3
C	5	2
D	7	2

Select one:

- a. 5.75 seconds
- b. 5.25 seconds
- c. 5.5 seconds
- d. 5 seconds

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$$A = 14 - 0 = 14$$

$$B = 4 - 1 = 3$$

$$C = 7 - 5 = 2$$

$$D = 9 - 7 = 2$$

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Quiz navigation



Finish attempt ...

Time left 0:45:40



12

answered
out of 1.0
question

Select the incorrect relative path to the Assignment directory.

Select one:

- a. home/student/Assignment
- b. ./Assignment
- c. Assignment
- d. ../../student/Assignment
- e. /home/student/Assignment

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Which scheduler move the process from new state to ready state?

Select one:

- a.
CPU scheduler
- b.
Long term scheduler
- c.
Short term scheduler
- d.
Medium term scheduler
- e. None of the above

Question 12

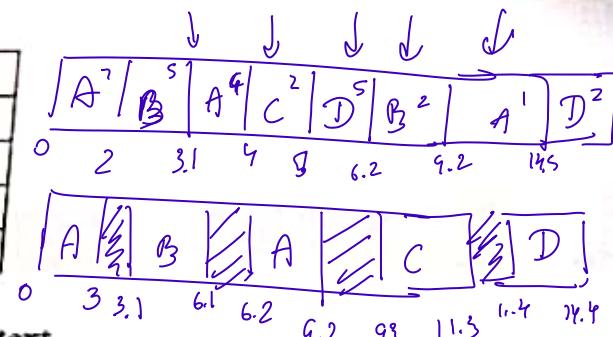
Not yet answered

Marked out of 1.0

Flag question

Given the following set of processes with their arrival times and burst times.

Process	Arrival time in milliseconds	Burst time in milliseconds
A	0	7
B	2	5
C	4	2
D	5	5



Apply round-robin (quantum = 3 milliseconds) scheduling considering the context switching time as 0.1 milliseconds.

Compute the average waiting time.

$$A \rightarrow (6.2 - 3.1) + (16.6 - 9.3) =$$

Select one: $3.1 + 7.3 = 10.4$

a. 35.1 ms

b. 35.21 ms $B \rightarrow (3.1 - 2) + (14.5 - 6.2) = 9.4$

c. 8.67 ms

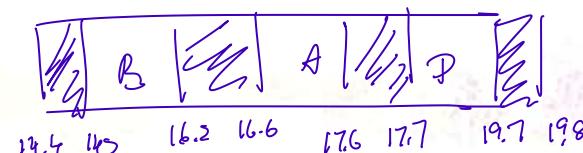
$$C \rightarrow (9.3 - 4) = 5.3$$

d. 8.77 ms

$$D \rightarrow (11.4 - 5) + (17.7 - 14.5) =$$

e. 7.775

$$6.4 + 3.2 = 9.6$$



$$\frac{34.7}{7} = 8.67$$