DSC 102
Systems for Scalable Analytics

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Surprise Quiz 3
Here is a Gantt Chart for 3 processes that all arrive at time 0. What is the rough average response time?

P1, P2, and P3 are of lengths 20, 10, and 20 units, resp.

<table>
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<tr>
<th>Time</th>
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A 0  D 10
B 3.33  E 15
C 5
Here is a Gantt Chart for 3 processes that all arrive at time 0. What is the rough average turnaround time?

P1, P2, and P3 are of lengths 20, 10, and 20 units, resp.

A  20  D  40
B 23.33 E 43.33
C  30
Which of the following is/are (a) major reason(s) for the increasing adoption of cloud computing?

A  Pay-as-you-go economics
B  Manageability
C  Privacy and security
D  Both A & B
E  All of A, B, & C
What is the speedup yielded by this task-parallel schedule?

<table>
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<tr>
<th>W1:</th>
<th>T1</th>
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</table>

A: 2  B: 2.33  C: 2.5  D: 2.67  E: 3
Which of the following AWS service(s) can be considered as an offering of Infrastructure-as-a-Service?

A  Aurora
B  EC2
C  Redshift
D  Sagemaker
E  Both A & B
Surprise Quiz

Which of the following parallelism paradigms does Hadoop/Spark use and is also popular for parallel RDBMSs?

A  Shared-Nothing
B  Shared-Disk
C  Shared-Memory
D  None of the above
E  All of A, B, & C
Which of the following data processing tool(s) is/are custom-designed for relational dataflow graphs?

A  Redshift
B  TensorFlow
C  PyTorch
D  Both B & C
E  Both A & B
Answers in order of questions

C, D, D, C, B, A, A