

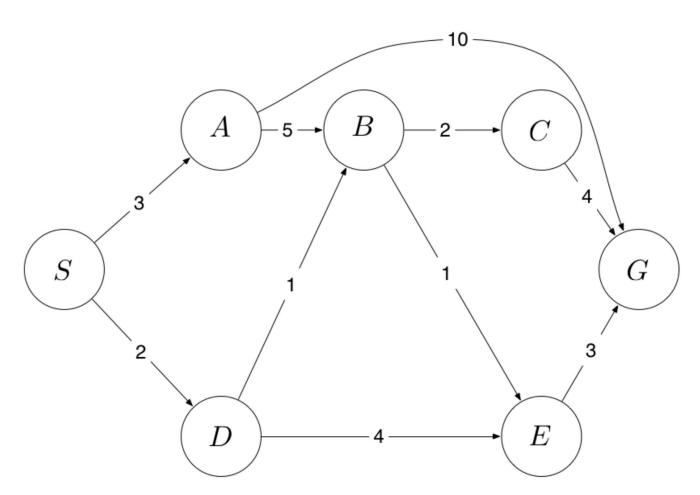
Course > Week 2 > Lecture... > Quiz 1: ...

Quiz 1: Search Execution

Quiz 1: Search Execution

3/3 points (ungraded)

For the graph shown below, run depth-first tree search, breadth-first tree search, and uniform cost search. Assume that ties are broken alphabetically. For example, a partial plan $S \to X \to A$ would be expanded before $S \to X \to B$; similarly, $S \to A \to Z$ would be expanded before $S \to A \to A$.



What solution is returned by depth-first tree search?

$$lacksquare S
ightarrow A
ightarrow G$$

$$ullet$$
 $S o A o B o C o G slash$

$$\bigcirc$$
 $S \rightarrow D \rightarrow B \rightarrow C \rightarrow G$

$$igcup S
ightarrow D
ightarrow B
ightarrow E
ightarrow G$$

$$lacksquare S
ightarrow D
ightarrow E
ightarrow G$$

What solution is returned by breadth-first tree search?

$$ullet$$
 $S o A o G$

$$lacksquare S
ightarrow A
ightarrow B
ightarrow C
ightarrow G$$

$$lacksquare S
ightarrow D
ightarrow B
ightarrow C
ightarrow G$$

$$lacksquare S
ightarrow D
ightarrow B
ightarrow E
ightarrow G$$

$$\bigcirc$$
 $S \rightarrow D \rightarrow E \rightarrow G$

What solution is returned by uniform cost search?

$$lacksquare S
ightarrow A
ightarrow G$$

$$\circ$$
 $S \rightarrow A \rightarrow B \rightarrow C \rightarrow G$

$$igcup S
ightarrow D
ightarrow B
ightarrow C
ightarrow G$$

$$ullet$$
 $S o D o B o E o G$

| S – | CD | | F | | |
|------------|-----------------|---------------|---|---------------|---|
| D – | $\rightarrow D$ | \rightarrow | L | \rightarrow | G |

Submit

✓ Correct (3/3 points)

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