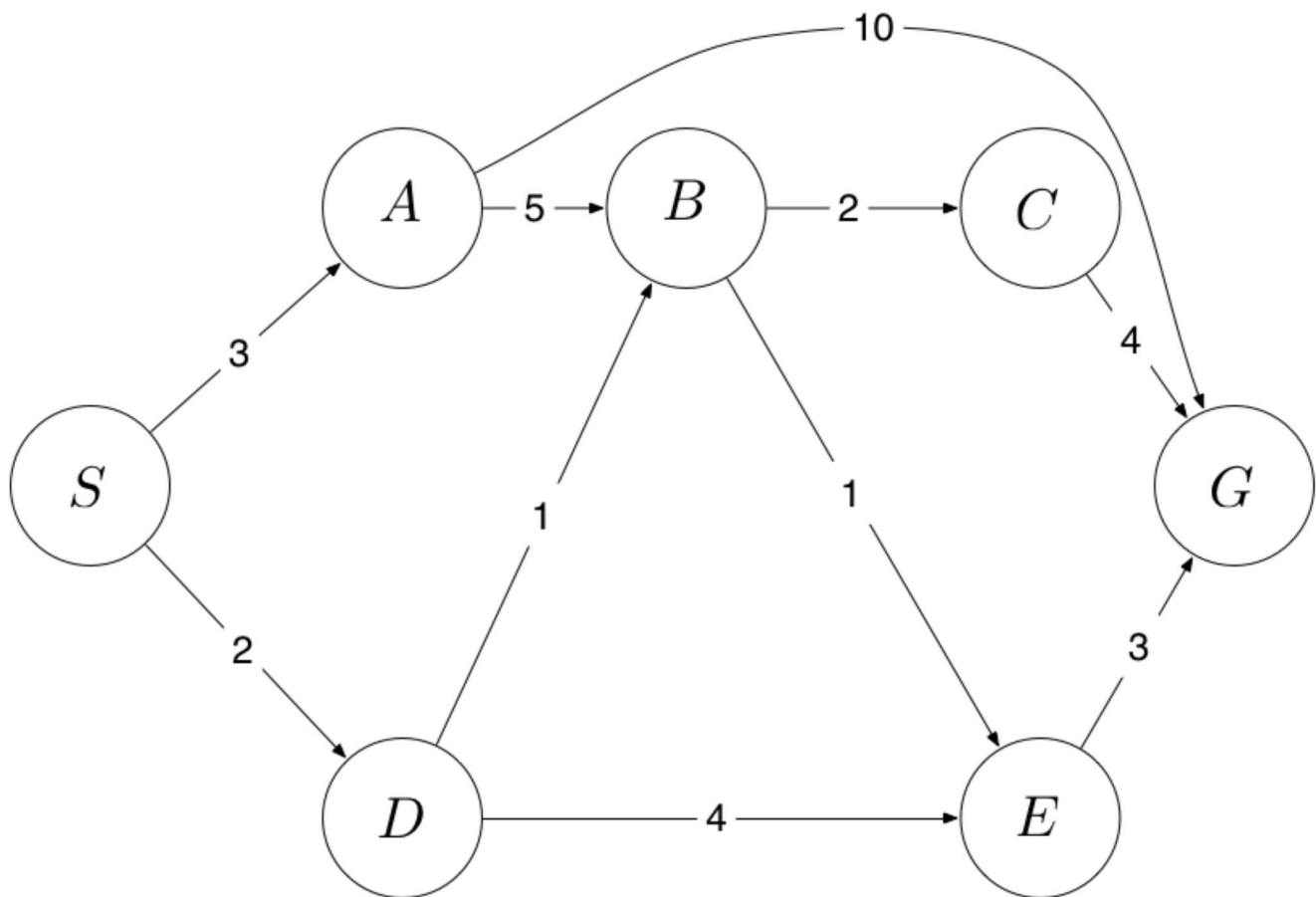


## Quiz 1: Search Execution

### 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  $S \rightarrow X \rightarrow A$  would be expanded before  $S \rightarrow X \rightarrow B$ ; similarly,  $S \rightarrow A \rightarrow Z$  would be expanded before  $S \rightarrow B \rightarrow A$ .



What solution is returned by depth-first tree search?

☐  $S \rightarrow A \rightarrow G$

☒  $S \rightarrow A \rightarrow B \rightarrow C \rightarrow G$  ✓

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

☐  $S \rightarrow D \rightarrow B \rightarrow E \rightarrow G$

☐  $S \rightarrow D \rightarrow E \rightarrow G$

What solution is returned by breadth-first tree search?

☒  $S \rightarrow A \rightarrow G$  ✓

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

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

☐  $S \rightarrow D \rightarrow B \rightarrow E \rightarrow G$

☐  $S \rightarrow D \rightarrow E \rightarrow G$

What solution is returned by uniform cost search?

☐  $S \rightarrow A \rightarrow G$

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

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

☒  $S \rightarrow D \rightarrow B \rightarrow E \rightarrow G$  ✓

☐  $S \rightarrow D \rightarrow E \rightarrow G$

Submit

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✓ Correct (3/3 points)