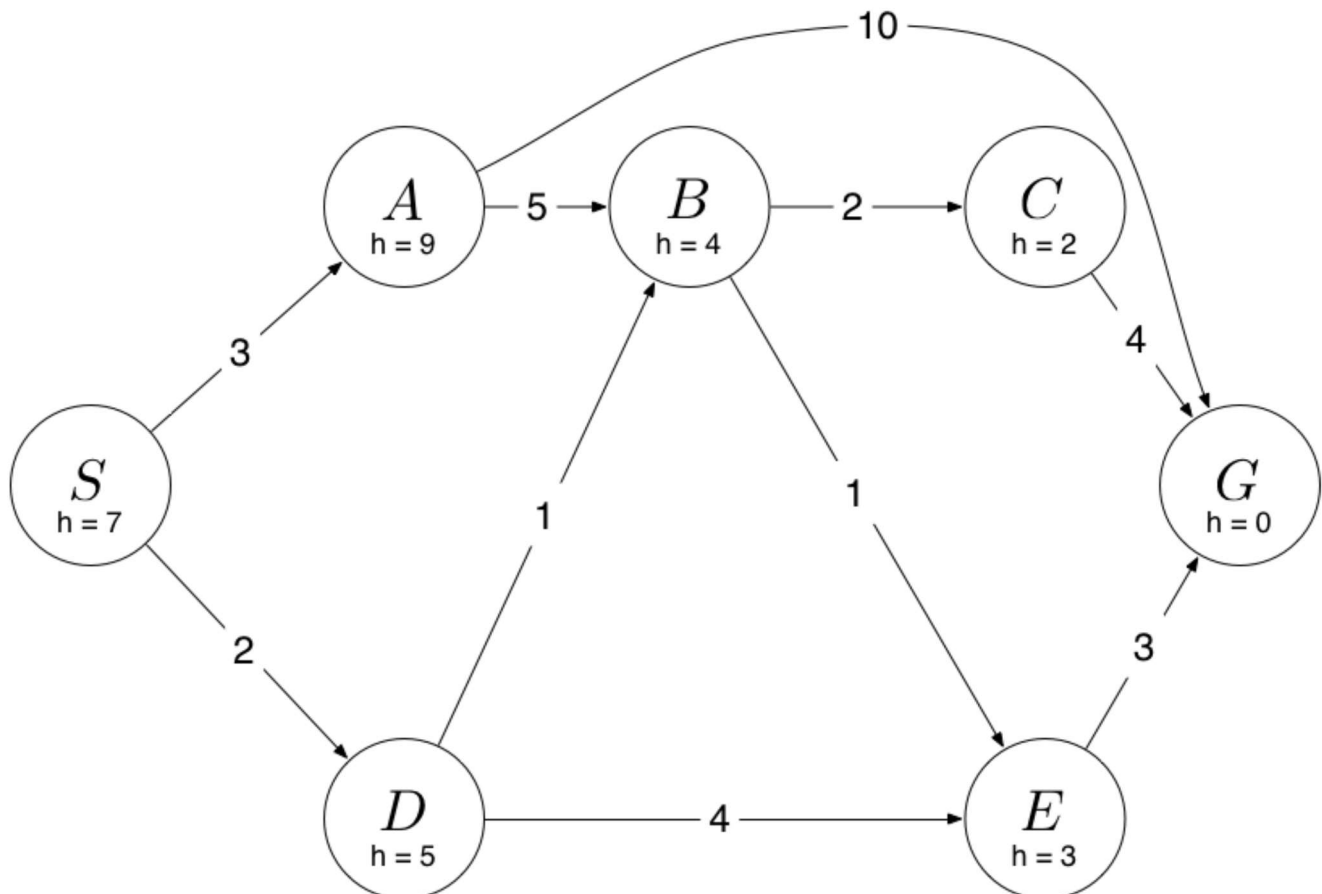# Quiz 4: A* Tree Search
Quiz 4: A* Tree Search

3/3 points (ungraded)

For the graph shown below, run A* tree 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 $S \rightarrow B \rightarrow A$.

Is the heuristic admissible?

⦿ Yes ✔

○ No

What solution is returned by A* tree search?

○ $S \rightarrow A \rightarrow G$

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

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

◉ $S \rightarrow D \rightarrow B \rightarrow E \rightarrow G$ ✔

○ $S \rightarrow D \rightarrow E \rightarrow G$

Which of the nodes below will be expanded during A* tree search?

☐ $(S \rightarrow A)$

☐ $(S \rightarrow A \rightarrow B)$

☐ $(S \rightarrow A \rightarrow B \rightarrow C)$

☑ $(S \rightarrow D \rightarrow B)$

☐ $(S \rightarrow D \rightarrow E)$

☐ None of the above

✔

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✔ Correct (3/3 points)