



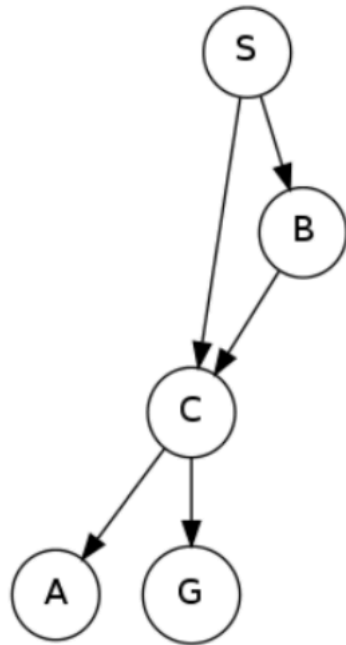
AU332 Quiz2

* 基本信息:

姓名:

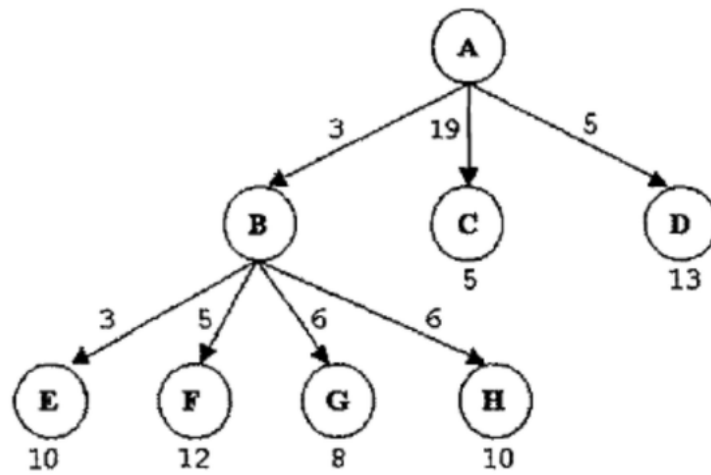
学号:

- *1. Consider depth-first search on the graph below, where S is the start node and G is the goal node. Assume that ties are broken alphabetically. You may find it helpful to execute the search on scratch paper. Please write down the final path returned by DFS algorithm. Your answer should be a string with S as your first character and G as your last character like $S \rightarrow \dots \rightarrow G$.



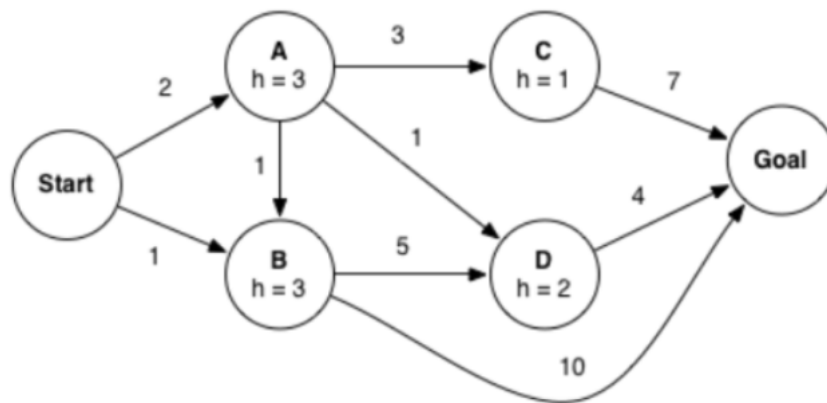
Answer: S → B → C → G

- *2. Consider a uniform cost search on the graph below, where A is the start node and C is the goal node. The number on the edge of the tree shows one-step cost going from parent node to the child node. Assume that ties are broken alphabetically. Please write down the search order using uniform cost search algorithm in the answer section below. Your answer should be a string with A as your first character and C as your last character.



Answer: A B D E F G H C

- *3. Consider A* graph search on the graph below. Arcs are labeled with action costs and states are labeled with heuristic values. Assume that ties are broken alphabetically.



In what order are states expanded?

- ☐ Start,B,D,Goal
- ☒ Start,B,A,D,C,Goal
- ☐ Start,A,D,Goal
- ☐ Start,A,B,Goal
- ☐ Start,B,A,D,B,C,Goal

- *4. For question 3, what path does A* search return?

- ☐ Start-A-C-Goal
- ☐ Start-B-Goal
- ☒ Start-A-D-Goal
- ☐ Start-A-B-Goal
- ☐ Start-A-B-D-Goal

提交

问卷星 提供技术支持