## Problem Wk.12.2: Nano Quiz

This problem is being submitted after the due date.
Due date: 4/28, 9:45am

Do all parts of this problem and then click Submit. There is only one Submit button, you should only do that when you are finished with all the parts of the problem.

Do not try to start another log in, you will lose what you typed.
There is a limited checking budget for this problem. Only 10 checks.
You have 15 minutes. You must click submit before:
4/26/2011, 4:51pm

## Part 1: Compare Searches

We are going to compare different search techniques on the graph below. Assume that:

- the start state is $\mathbf{S}$
- the goal state is G
- the successors of a state are pushed on the agenda in alphabetical order
- we are not considering paths that revisit the same state (within the path)

Note that each answer below is a partial path. Enter all your answers as sequences of state names, with no punctuation, e.g. S B D, spaces are optional.

1. In the boxes below, enter the sequence of partial paths that are pushed on the agenda by breadth-first search without dynamic programming.

When you get to the final path, enter it only in the designated 'Final path' box, and enter None in the remaining unused boxes.

You should not need more boxes than have been provided.


1. $S$
2. $S A$
3. $S B$
4. 

[ Your response: is incorrect. A valid answer is: SAC ]
5.
[ Your response: is incorrect. A valid answer is: SAD ]
6.
[ Your response: is incorrect. A valid answer is: SBE ] $\bigotimes$
7.
[ Your response: is incorrect. A valid answer is: SBF ] $\bigotimes$
8.
[ Your response: is incorrect. A valid answer is: SACD ]
9.
[ Your response: is incorrect. A valid answer is: SADC ]
10.
[ Your response: is incorrect. A valid answer is: none ]
Final path is
[ Your response: is incorrect. A valid answer is: SBFG ]
2. In the boxes below, enter the sequence of partial paths that are pushed on the agenda by breadth-first search with dynamic programming.

When you get to the final path, enter it only in the designated 'Final path' box, and enter None in the remaining unused boxes.

You should not need more boxes than have been provided.


1. $S$
2. $S A$
3. $S B$
4. 

[ Your response: is incorrect. A valid answer is: SAC ] $\bigotimes$
5.
[ Your response: is incorrect. A valid answer is: SAD ] $\bigotimes$
6.
[ Your response: is incorrect. A valid answer is: SBE ] $\varnothing$
7.
[ Your response: is incorrect. A valid answer is: SBF ] $\bigotimes$ 8.


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