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**Exercise 1**

Does BFS find a least cost solution? How many nodes are expanded?

Yes,

+tinyMaze: 15 nodes

+mediumMaze: 269 nodes

+bigMaze: 620 nodes

1. Fill out the table below:

	Best First Search			A* Search		
Maze	#nodes expanded	Solution length	Is it optimal?	#nodes expanded	Solution length	Is it optimal?
tiny	15	8	Yes	15	8	Yes
medium	269	68	Yes	269	68	Yes
big	620	210	Yes	620	210	Yes

2. What happens on openMaze for the various search strategies?
- The same path and path cost are displayed by BreathFirstSearch, AStarSearch, UninformCostSearch, and BestFirstSearch.
  - Although depthFirstSearch does not optimize, it must search for every corner of an openMaze, which results in a higher path cost.
3. A Short discussion/reflection of how the searches compare to each other and to the uninformed searches from Assignment#2:
- We can see that the BestFirstSearch and A\*Search share the same result in three aspects which are nodes expanded, solution length, and optimal. All of them are run in tiny, medium, and big maze also leading to clearer in testing which is the same.