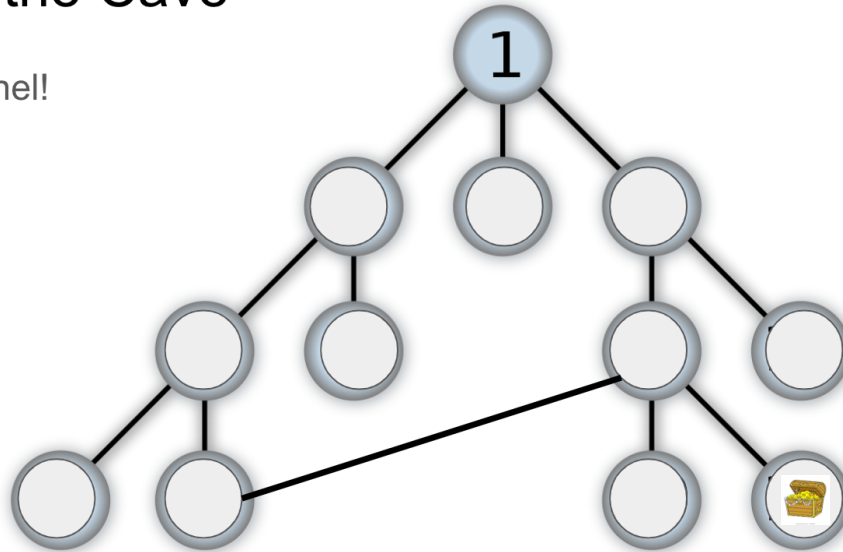**Day 1 [BFS vs DFS]**

Data Set: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]

Map of the Cave

Secret Tunnel!

1) In red, trace the path of the BFS if the solution (key) is in the bottom-rightmost node.
2) In blue, trace the path of the BFS if the solution (key) is in the bottom-rightmost node.

Subgoal Label a DFS Method (include any helper methods that you feel are necessary)

Discussion Questions: (Feel free to use this space to jot down some of your ideas prior to discussion)

Describe the difference between BFS and DFS. Which one is better in your opinion, and why?

What is not ideal about both BFS and DFS?

Day 2 [A* Search]

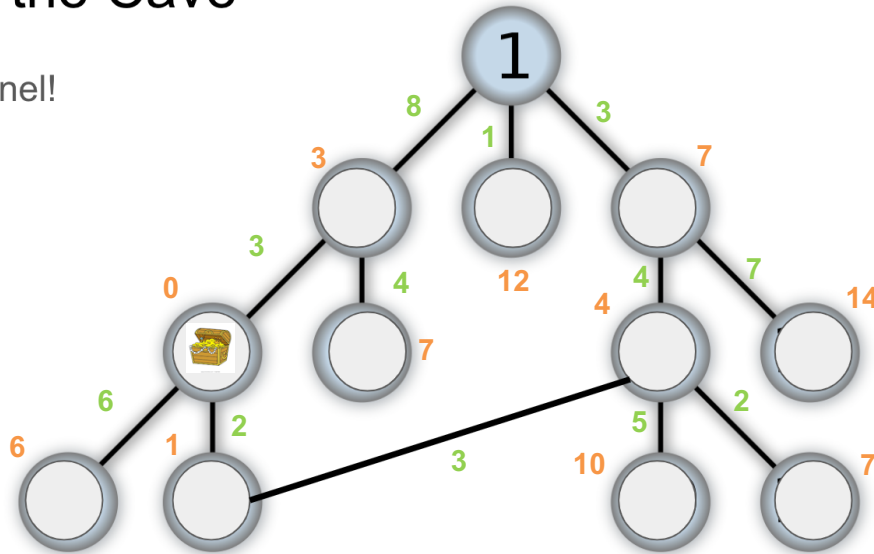h = the node's closeness to the goal(treasure)
g = the cost of traveling to that node
f = h + g

Data Set: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]

Map of the Cave

Secret Tunnel!

1. In blue, trace the path of the A* search to the treasure box.
2. In red trace the path of the A* search if the treasure box is in the bottom-rightmost node.
        *(Question - can we do this with the same h values if the treasure box is moved?)

Subgoal Label an A* Search Method (include any helper methods that you feel are necessary)
***EXT- start writing out pseudo-code within your subgoal structure**

Discussion Questions: (Feel free to use this space to jot down some of your ideas prior to discussion)

What is the difference between uninformed and informed search methods?

Why is A* generally so much more efficient than BFS or DFS?

What are some potential real-world applications of the A* search?