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A.I HW2

Problem 1:

Using BFS, we kept track of when the visited set contained the parent nodes and the queue set contained their immediate child nodes. We also kept track of this occurrence as it corresponds to the level. When the desired level is reached, we return the friends as this level to the given

user.

Problem 2:

Using BFS, we kept track of when the visited set contained the parent nodes and the queue set contained their immediate child nodes. We also kept track of this occurrence as it corresponds to the level. Level 1 is the given user, level 2 is the given user’s immediate friends, level 3 is the given user’s immediate friends’ immediate friends (the desired result)

Problem 3:

Using DFS, we keep track of whether the goal state enters the visited set. If not, the goal state cannot be reached from the start state.