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CS4300

Taxi 1

Search Algorithm:

I decided to go with the depth limited search algorithm. My reasoning behind this search algorithm was that it was the recommended choice and it made the most sense to me. After taking algorithms DFS made sense to me and DLS is simply DFS with a limit on how many iterations DFS can go. DLS allowed me to find a path that worked that had a maximum of n iterations. This allows the time complexity to be b^L where L is the limit. It makes sense for the taxi to go depth first instead of breadth since it can find the goal state faster and doesn't need to explore all of its options. Generally the taxi is going to be far away from the goal state so it must make multiple moves deeper based on other positions to get to the goal state. Those were my reasonings in addition to the discussions in class.

Scores

Iterations	Average Score
200	5.195
150	5.08
100	5.03