ECS 170 - Assignment 1
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Part 4:

For this part we ran the same heuristic and A* algorithm to find the optimal distance. To get better time we tried changing the data structure and tried using leer loops, where a program can spend a lot of time. Using hashmaps reduced the time considerable, even for part 2. This is the only major change we made. We use the same admissible heuristic as in part 1.

The algorithm is similar to the pseudocode given in class.:
We maintain a closed and open list for every node. We start with the start node and add it to the open list. We create its successor and if the successors are not in the HashMap we add it, if it is with a cost lower that before we update it and its previous node. When we get to the end node, we turn in the path created by the parents.