

### Task 1

This problem is a straight implementation of Dijkstra algorithm. Used the visited array so it there's any cycle in the graph, code doesn't falls in infinite loop. Used the built in library heapq to implement a <sup>min</sup> ~~max~~ heap.

### Task 2

re used the Dijkstra method from Task 1. It was returning distance. Applied dijkstra from two given node stored it into two different arrays. Compared that two arrays to find the minimum time to and the node. If not possible then the output is impossible.

### Task 3

This is a modified implementation of Dijkstra's algorithm. Popping from the min heap compared the larger. Maintained a parent array to backtrack.