

5. The goal of this problem is to reach as many people (or everyone) as quickly as possible. This is a BFS solution:

for each position to park the truck in the neighborhood
(This is assuming the graph is made with a node for each house with a distance of 1 to each other node)

run Dijkstra's algorithm on the graph, with starting position being the truck position

If max distance to another node is < previous truck position distances:

That is the new best truck location

The distances computed by Dijkstra's are the number of minutes it would take to vaccinate that house, find the optimal position by running it on every possible position. We prefer the max distances to be lower, so we want the position that gives us the shortest tree from Dijkstra's Algorithm.

You also could use Kruskal's algorithm and create a minimum spanning tree to run Dijkstra's on, but I think using Dijkstra's is good enough