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PA 3 reflection

In general, I think learning algorithms and applying it to a program assignment is fascinating because I get to see an example of situations it can be applied to. I also find it enjoying because we are technically using math concepts and that always makes sense. I have noticed that when I think in math and program, it becomes more enjoyable to deal with data. Or it could be that the material from Discrete Mathematics is finally being applied to programming and now it’s all making sense.

For tier 3, I got 38 minutes and 27 minutes when I ran deliveries 3.1/3.2 at first because I was computing Dijkstra’s algorithm(compute\_shortest\_path) at each delivery and then I searched for the next delivery in the map that was returned for computing the shortest path. Then once having new weights and new connections, I did the MST. I assumed it was that simple because my answers were right for the previous maps and deliveries.

What really helped for this assignment, was to find the paths of the given maps on a piece paper like we have done in class. This was done in order to check if I was getting the correct results. Doing this, made it possible to understand the program because I was able to walk through the steps of what my intentions were. I also wrote comments to increase readability but I’m not sure if a reader would understand because no one can interpret something the way it was originally intended for.

I do remember wanting to add a function that returned the \_graph that was created in the Graph class. Doing so, would allow me to directly check if the houses from the map.txt files existed. If they did not exist on the \_graph, I would add the house as a vertex, if it did, then don’t. However, then I thought a function that directly returned the \_graph would ruin the purpose of the actual class; also, maybe pose as a security issue since data would easily be accessible (plus it’s most likely not good practice to do so).