

# CSCI 4610 Assignment 1 Report

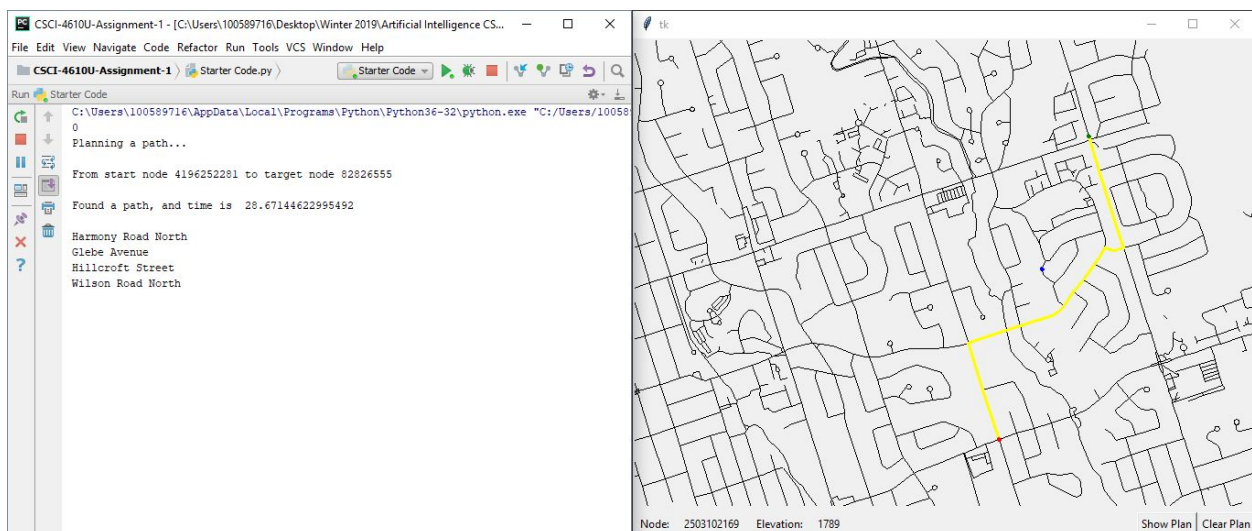
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## Heuristic Function

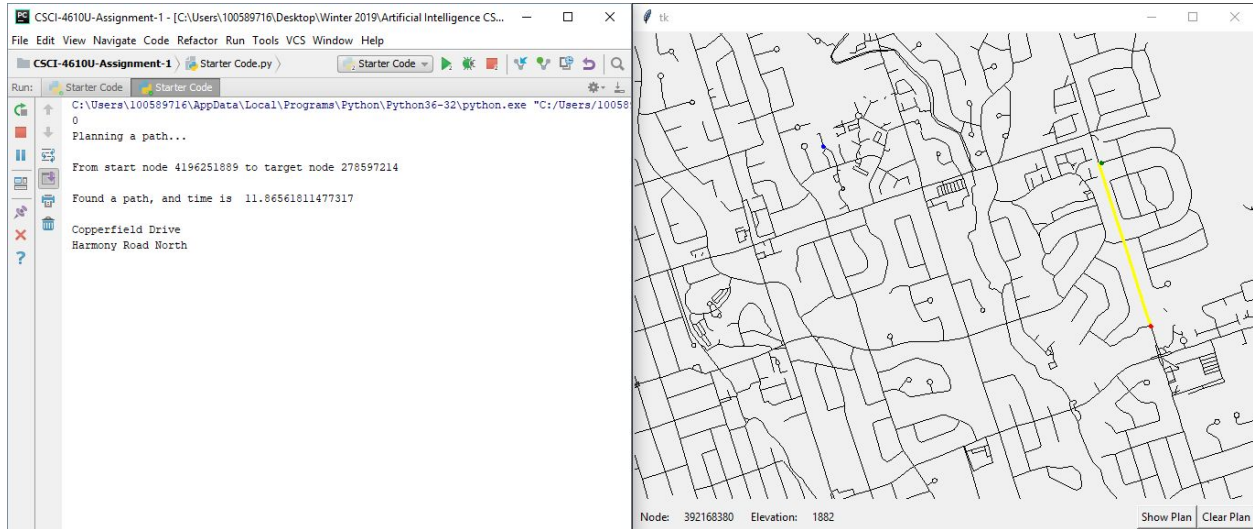
We used Pythagorean theorem for the heuristic. Since this does not take into account the path for construction and traffic in the data, we had to use pythagorean theorem to determine the hypotenuse for elevation distance and node distance. The nodes which are the most close to the target node in the distances of the x and y coordinates would give the shortest path. We think that the actual distance and the actual relative distance gives us the closest correct data.

## Sample Runs

### Run 1:



## Run 2:



Github Link: <https://github.com/saijeeshanketheeswaran/CSCI-4610U-Assignment-1>

## Work Done

Everyone in our group worked on the code together to figure out the assignment because working it on separate made it harder for us to finish the assignment. However we did split up certain parts. For example Abinash was responsible for the file handling, while Saijeeshan worked on the heuristic and path cost function. Rohil worked on the UI in the meantime. We later came together and combined our parts and successfully completed the A\* search.