Personal Reflection

I quickly realised that an A\* search was the best method for finding a valid route linking the two city pairs and that it would allow for optimality to be used as a heuristic aside obtaining the distance between the points with haversine. I began by importing the CSV file database using a buffer read. This is because it reads the lines from a small buffer stream, which makes it easier to put the data in an array that would be indexed. While researching the A\* search algorithm, I came across a GitHub project that uses the method to find a taxi for a customer who calls for one. Quite abstract, but the idea was quite helpful

The value "f," a parameter equal to the sum of two additional parameters, "g" and "h." is used by the A\* Search Algorithm to choose which node to choose at each step. At each stage, it selects and processes the node or cell with the lowest "f" The cost of moving along a route designed to travel from a starting point to a specific city is called g. h is the estimated cost of travelling from one city to another based on their respective haversine values. The term "heuristic" is commonly used to refer to this sum, which is essentially another way of saying "educated guess."

After that, I optimised algorithm to output the results to a file.