***TEST PLAN***

***Nearest Station:***

I will test this method using the following table:

|  |  |  |
| --- | --- | --- |
| **Inputted Latitude** | **Inputted Longitude** | **Expected Result** |
| 41.8788764 | -87.635914899999 | Quincy Station |
| 41.766711 | -87.6459001629 | 69th |
| 41.85674 | -87.6361547 | Cermak-Chinatown |

Errors:

* The user does not enter an integer/double.

Error rectification: An error message is shown followed by the menu again.

***Modify:***

This method should be able to modify a station by inputting the name of the station. The errors could be the following:

* The user does not enter a station which exists.
* The user enters the right name but does not enter the right integers/doubles/strings for the attributes asked.

Error rectification: An error message is shown followed by the menu again.

***Search for a station:***

This method should be able to search for a station by inputting the name of the station.

Errors:

* The user does not enter a string for the name of the station.
* The user does not enter the name of the station which exists.

Error rectification: An error message is shown followed by the menu again.

***Add a new station***

This method should be able to add a new station by first inputting the name of the station the new station has to be entered after, and then the details of the new station.

Errors:

* The user does not enter the name of a station, the new station has to be after, which exists
* The user enters the right name but does not enter the right integers/doubles/strings for the attributes asked.

Error rectification: An error message is shown followed by the menu again.

***Delete a Station***

This method should be able to delete a station by inputting the name of the station to be deleted.

Errors:

* The user does not enter a string for the name of the station.
* The user does not enter the name of the station which exists.

Error rectification: An error message is shown followed by the menu again.

***Find the route from a location to another one***

This method should be able to find the route between two locations, by inputting the latitudes and longitudes of the two locations.

Errors:

* The user does not enter integers/doubles for the latitude or longitude for the location.

Error rectification: An error message is shown followed by the menu again.

***After all the methods are implemented, the changes are written to an output.csv, which demonstrates Polymorphism.***

***The entire project i.e., Phase 1 and Phase 2, has been done by Aditya Dasgupta and Samiksha Shrivastava, due to which the wordings and layout are the exact same. None of us have copied the other’s work without having contributed a 100% in it. The Github link for our project, which shows our contribution is below:***

https://github.com/adityadasgupta/cs201\_project