Instructions

1. For the preprocessing part you must run the Preprocessing.ipynb first. This will generate the following pickle files which are required to run A_star_Algorithm.ipynb:
    - all_edges
    - all_nodes
    - dist_to_trg
    - lst_g
    - min_max
    - trg

2. Afterwards run the A_star_Algorithm.ipynb to generate the results files.

3. Alternatively, just run Newton_Raphson_Results.ipynb which automatically loads pre-existing pickle files generated from a previous run of A_star_Algorithm.ipynb.
    - Namely: [exp_var3_100, exp_var5_100] combined gives 200 observations

4. After Running Newton_Raphson_Results.ipynb you can open A_star_Algorithm_Results_Comparison.ipynb which plots the routes using the beta parameters estimated in NR.
    - Here you can change which source/target observation to run the A* search (obs = x)

Note: Public_Transit_Generate.ipynb was used to generate G_Public, if curious, you can run to see how it works.

- For A* search, only the G_public that is generated using the "Generate G_Public with Simplified Bus Network" cell is used.