**DATASET:**

***Raw Dataset:***

The New York taxi trip dataset for the period January 2023 to December 2023 is downloaded from the official website below,

<https://www.nyc.gov/site/tlc/about/tlc-trip-record-data.page>

***Processed Dataset:***

<https://drive.google.com/drive/folders/1gv3h27pQIN1rSF4oI23BEbEsuzB4dOd2?usp=share_link>

**CODE EXECUTION INSTRUCTION:**

The code file contains the following folders each with the .py files in OOPS format and their corresponding .ipynb notebooks for reference.

The code has to be executed in the same order as mentioned below,

**Data\_Exploration\_And\_Preprocessing**:

**Data Preprocessing**

*1) code/Data\_Exploration\_And\_Preprocessing/data\_preprocessing.py*

*2) code/Data\_Exploration\_And\_Preprocessing/Demand\_Forecasting\_DataPreprocessing.py*

**Date Exploration**

*3) code/Data\_Exploration\_And\_Preprocessing/hourlytrendsanalysis.py*

*4) code/Data\_Exploration\_And\_Preprocessing/kmeansclustering.py*

**DemandForecasting:**

*5) code/DemandForecasting/Demand\_Forecasting.py*

**DurationPrediction:**

*6) code/DurationPrediction/Duration\_prediction.py*

**FarePrediction:**

*7) code/FarePrediction/fareprediction.py*

**TimeSeries:**

*8) code/TimeSeries/timeseriesanalysis.py*