**Description:** End to end data analyst portfolio project from gathering data programmatically using the Kaggle API, through data exploration, assessment and manipulation using the pandas library in Python, to data visualisation in Tableau.

**Tools Used:**

* Kaggle
* Jupyter Notebook
* MS Excel
* Tableau

**Process:**

1. Download the London Bike Sharing dataset from Kaggle.
2. Used Kaggle API library in python to directly import the Kaggle dataset from Kaggle into Jupyter.
3. Performed Exploratory Data Analysis.

* I explored the data.
* Renamed columns.
* Changed numeric to percentage value in the humidity column.
* Created two separate dictionaries to map the integer values to actual written values for season and weather columns.
* Changed the datatype of season and weather columns to ‘string’ from ‘int’.
* Mapped the values of both the columns to actual written values.
* Checked the dataframe to see if the conversion worked.

1. Converted the final dataframe to an excel file which I used for my Tableau visualizations.
2. In Tableau I created an interactive dashboard comprising of 3 visualizations including a KPI card, dynamic line chart, and a dynamic heat map for the dashboard. Apart from that I also created two more visualizations – bar chart for weather and time(Hour).

**Conclusion:**

Gained important timely insights from the London Bike Sharing data by cleaning, manipulating, and visualizing it.