Analysis for opening a new Asian Restaurant

Choosing right location for opening new Asian Restaurant in Toronto

Prior launching any restaurant, it is important to know if the business has a good opportunity. The factors we have to take into consideration are as follows,

- Market Places
- Competition in particular location
- Aiding places that make people come to restaurants like Gym, Entertaining Public places
- Population
- Menu from competitors
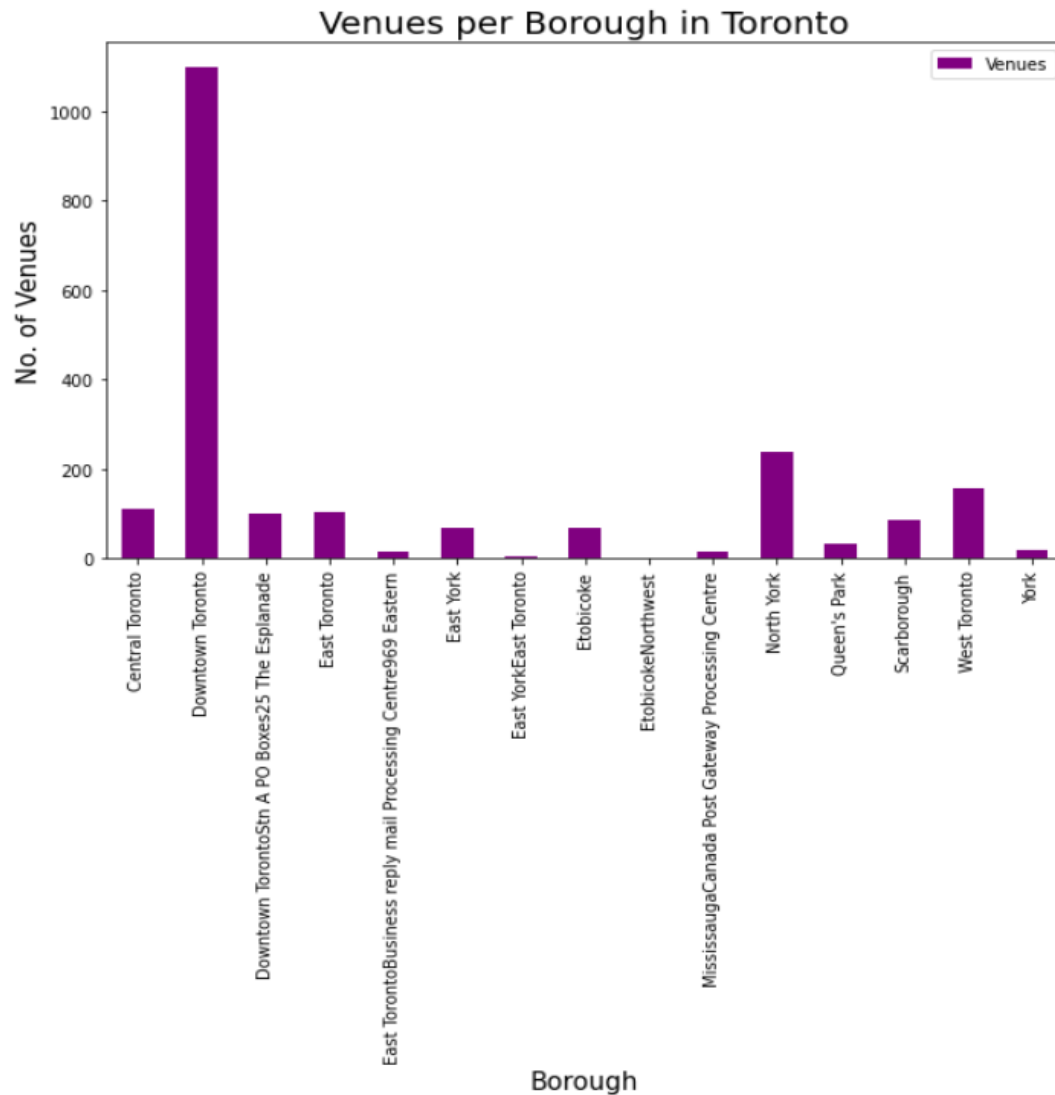- Income of people residing in the neighbourhood

Data Acquisition and Cleaning

- Data for neighbourhoods and boroughs
  https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

- Data for longitude-latitude coordinates of neighbourhoods
  https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-DS0701EN-SkillsNetwork/labs_v1/Geospatial_Coordinates.csv

- '**BeautifulSoup**' library is used to extract data, and this data is stored in dataframe

- '**Foursquare API**' is used to locate all venues for the neighbourhoods in Toronto.

- In total, there are 2111 rows and 8 columns in raw data.

- Data is pre-processed; duplicate data, unnecessary data is dropped and the dataframes are merged to obtain the required dataframe.
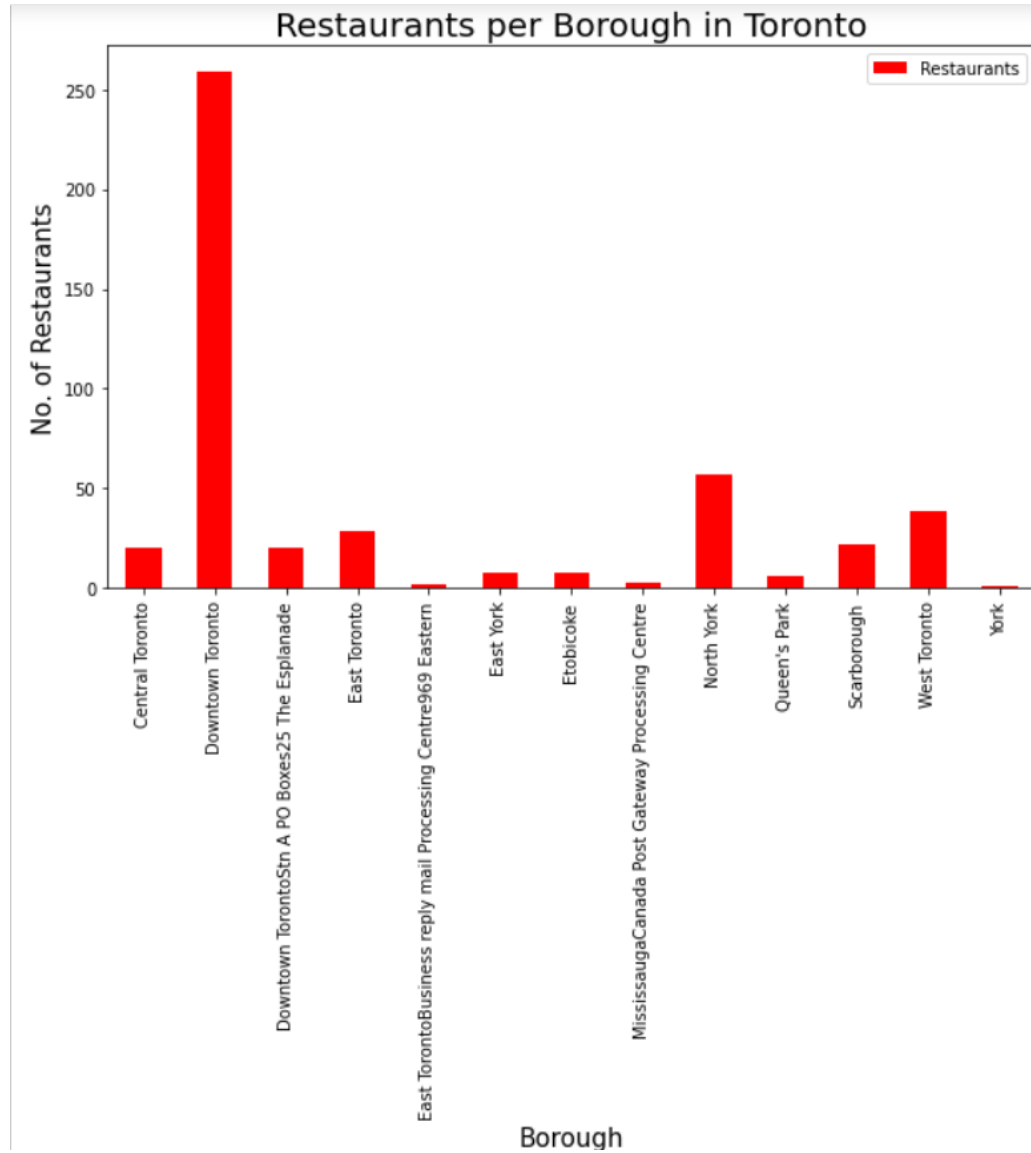
Data Analysis and Data Visualization

- **matplotlib.pyplot** library is used to plot the graphs based on the data analysis.

- **Folium map** is used to plot the map of all the restaurants data and Asian restaurants data which helps with visualization.
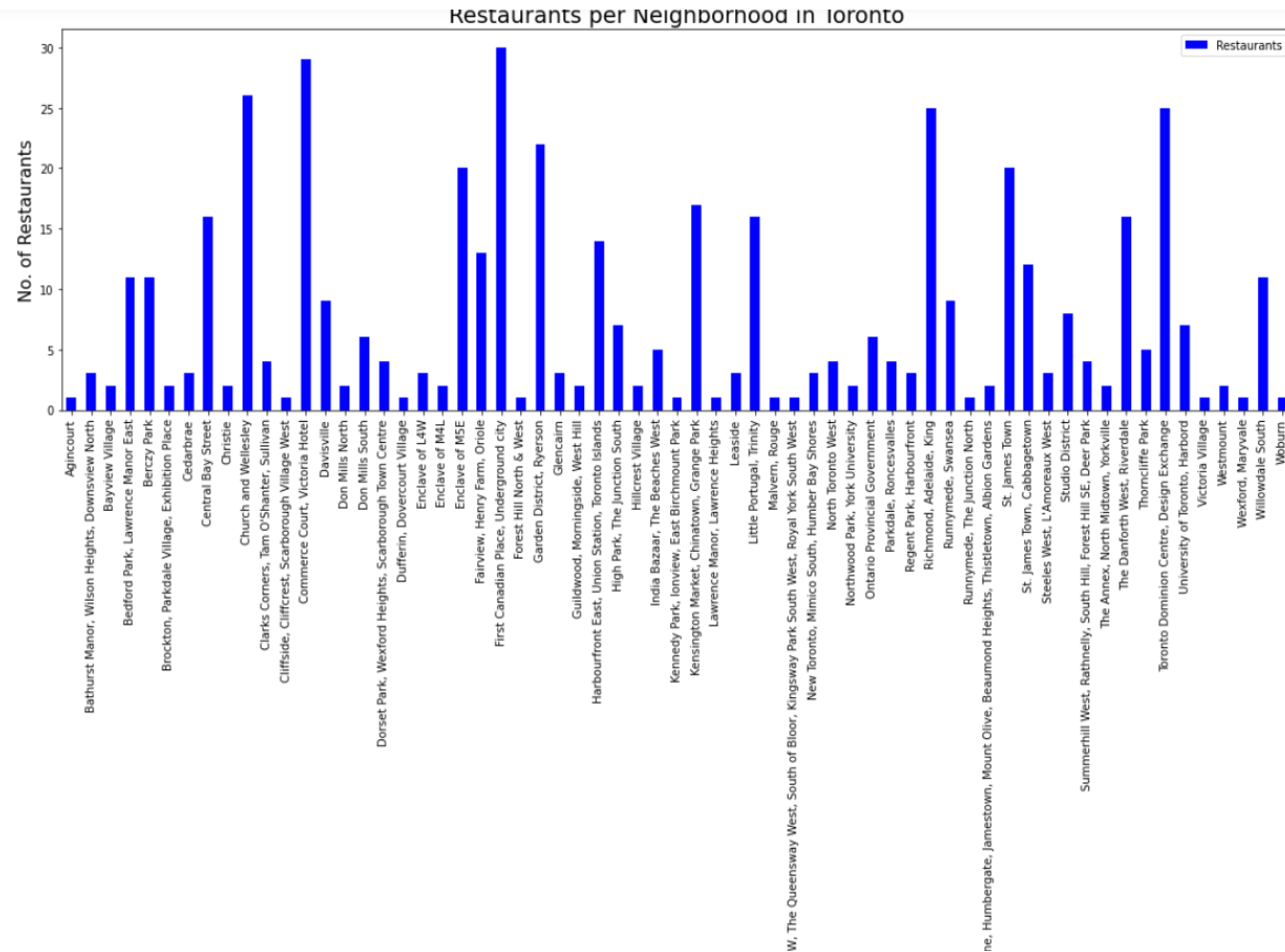
Number of Venues per Borough

Downtown Toronto is the most popular borough in Toronto with maximum number of venues located while **Etobicoke** is the least popular.
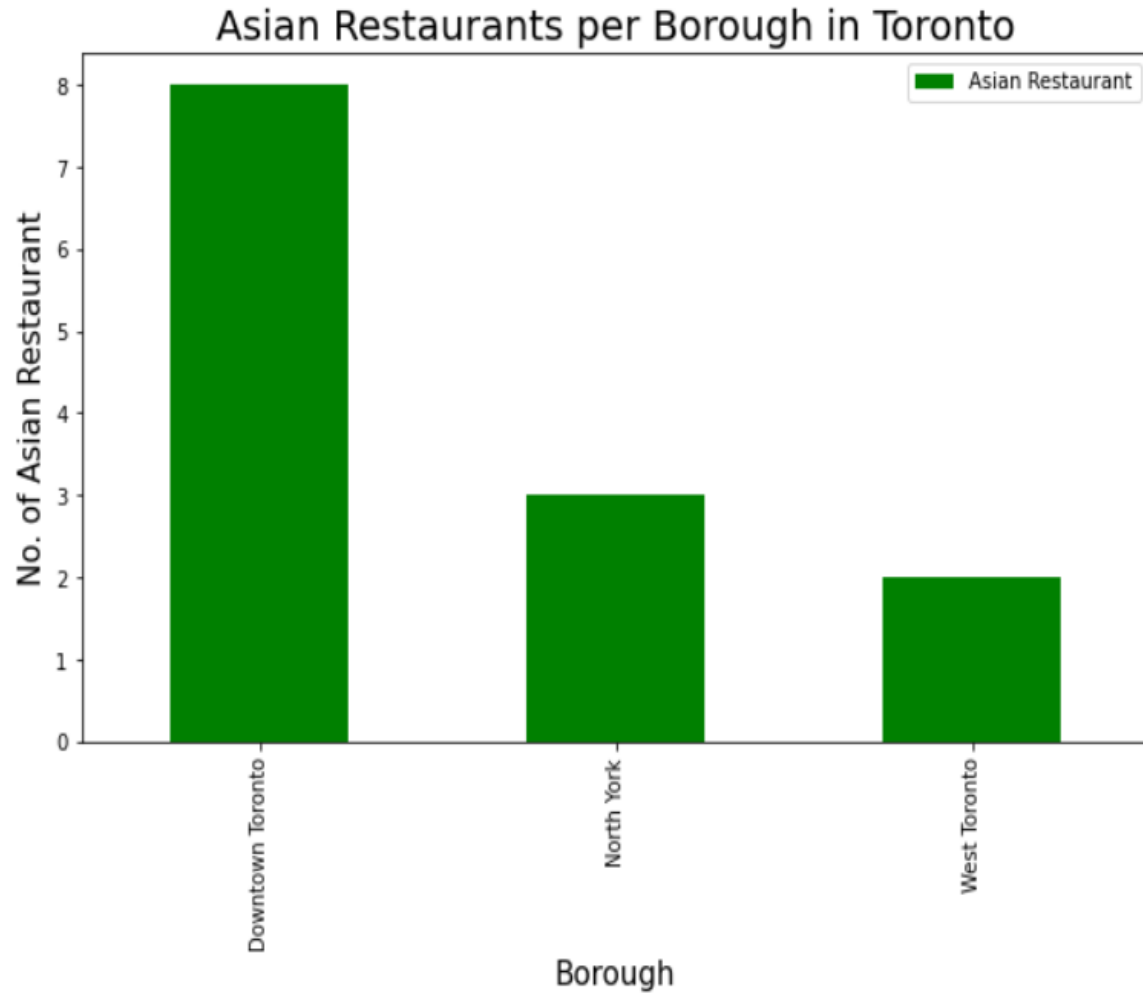
Number of Restaurants per Borough

Downtown Toronto is the most popular borough in Toronto; it has multiple attractions and hence it is expected to have variety of restaurants.

Number of Restaurants per Neighborhood

Downtown Toronto has highest number of restaurants, thus it is pretty much evident that the top five neighbourhoods with highest number of restaurants are from Downtown Toronto.
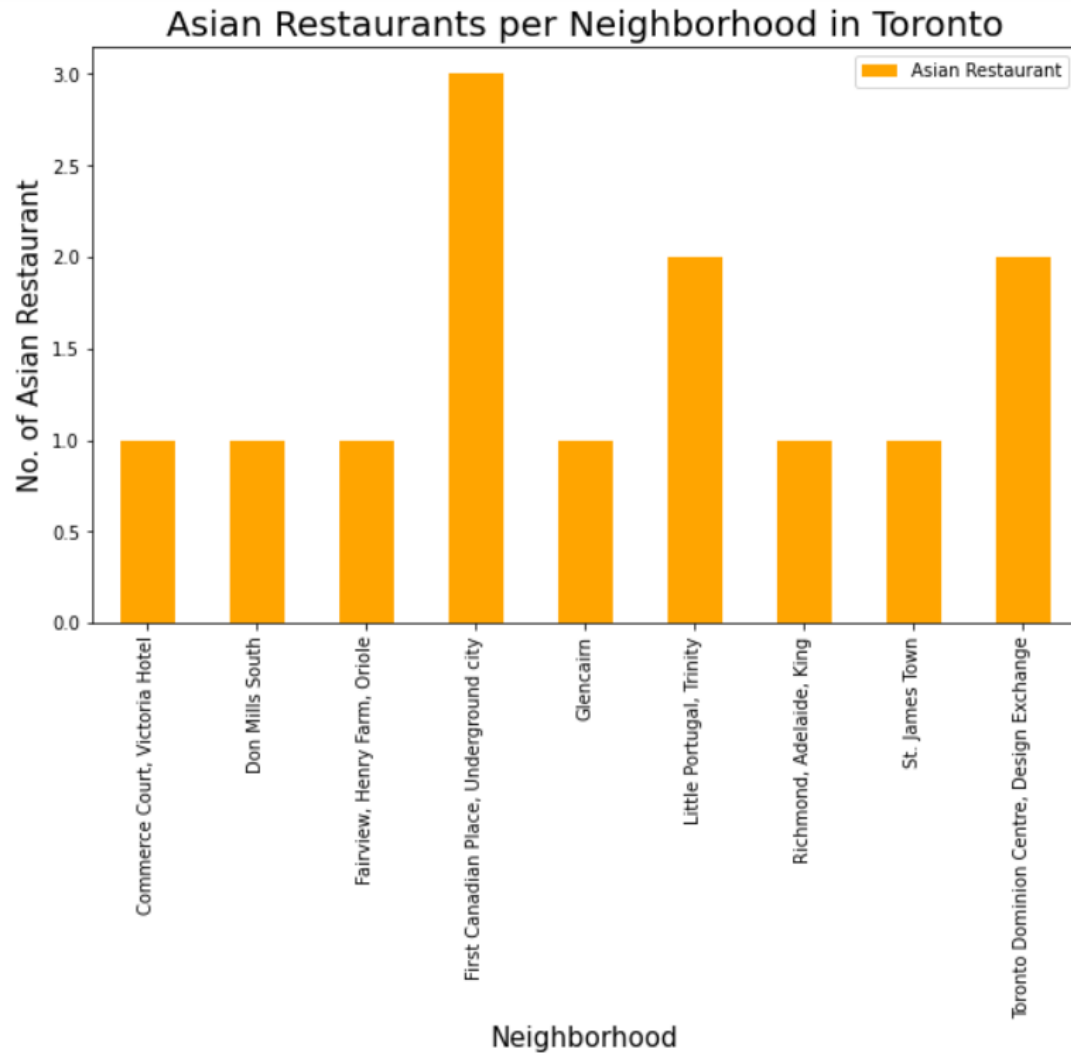
Number of Asian Restaurants per Borough

West Toronto is ideal location for establishing new Asian restaurant as it has only few options available. But it seems **Downtown Toronto** is popular amongst people for dining at Asian Restaurant as it has maximum number of them.

Number of Restaurants per Neighborhood

Asian Restaurants per Neighborhood in Toronto

First Canadian Place is most popular for Asian Restaurants. So, if we are concerned with popularity of area, First Canadian Place, Underground City is ideal place to open new Asian Restaurant.

To avoid the competition, we can choose neighbourhood with least number of restaurants to provide people with new place to enjoy Asian cuisine. Some of the neighbourhoods are **Commerce Court, Don Mills South, Fairview, Glencaim, St. James Town**, etc.

Discussion

- Based on the results of our analysis, Downtown Toronto have multiple neighbourhoods with good number of restaurants which suggests that people ideally choose any of the neighbourhoods from this borough for dining.

- On the contrary, neighbourhood in West Toronto have good possibility for opening new Asian Restaurant as it has only few in the neighbourhood of Little Portugal Trinity. Thus, opening a new Asian Restaurant in West Toronto will provide people with another option to try Asian cuisines.

Conclusion

In this project, we have performed

- Data extraction,

- Data pre-processing –transformed extracted data into dataframes, filtered required data, merged different dataframes

- Performed analysis on filtered data

- Recommendations based on the analysis.

- Used different python libraries to perform the task.

- The findings of this project will help investors to understand in a better way, the advantages and disadvantages of different boroughs and neighbourhoods of Toronto in order to open new Asian Restaurant.