Capstone Project

Open a Japanese Restaurant in New York City

Problem

This project explores the best locations for Japanese restaurants throughout the New York City.

In particular, the location of the restaurant is one of the most important factors that will affect whether it will have success or a failure. Therefore, this project would answer the questions

"If someone is looking to open a new Japanese restaurant in the New York City, where is the best area for opening a new Japanese Restaurant?"
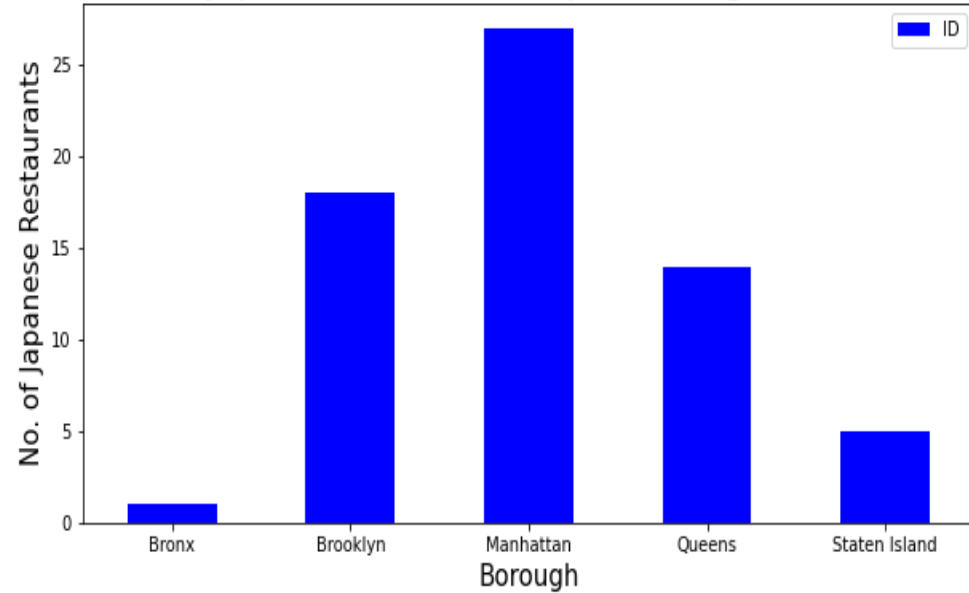
Data

- New York City data containing the neighborhoods and boroughs.

- Venue data, particularly data related to restaurants.

- Latitude and longitude of those neighborhoods.

- New York City data containing the neighborhoods and boroughs will be obtained from the open data source: https://cocl.us/new_york_dataset.

Methodology

- Data will be collected from https://cocl.us/new_york_dataset and cleaned and processed into a data frame.

- FourSquare be used to locate all venues and then filtered by Japanese restaurants. Ratings, tips, and likes by users will be counted and added to the data frame.

- Data will be sorted based on rankings.

- Finally, the data be will be visually assessed using graphing from Python libraries.
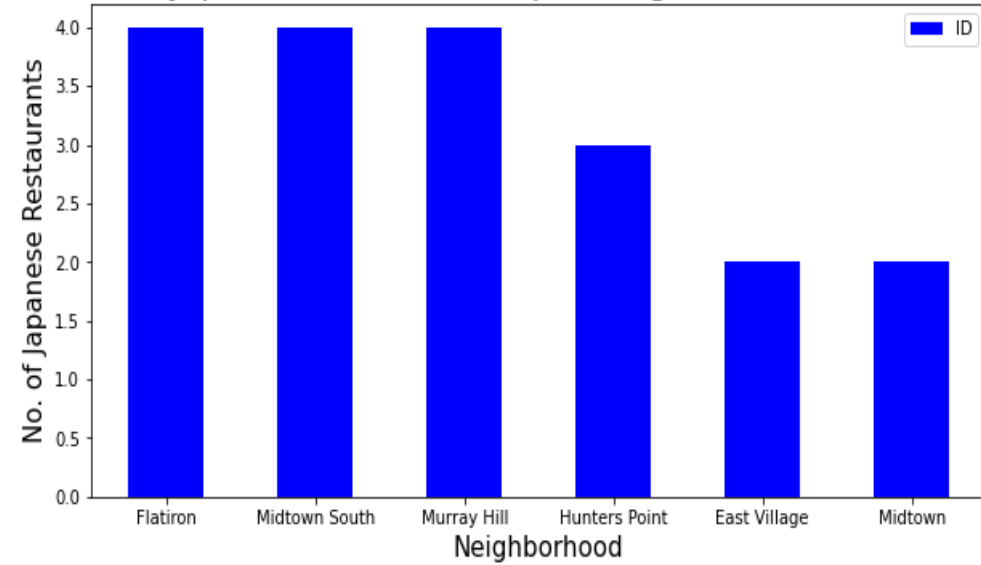
Results

Japanese Restaurants per Borough: NYC

Manhattan have the highest number of Japanese restaurants.

Japanese Restaurants per Neighborhood: NYC

This is the top 6 neighborhoods, Flatiron has the highest number of Japanese restaurants in New York City.

Results

Resturant with maximum Likes

```
japanese_rest_stats_ny.iloc[japanese_rest_stats_ny['Likes'].idxmax()]
```

```
Borough                      Manhattan
Neighborhood              Midtown South
ID                51e8ce40498ea1fb0180efb2
Name                       Izakaya MEW
Likes                             1054
Rating                             8.8
Tips                               266
Name: 47, dtype: object
```

Resturant with maximum Ratings

```
japanese_rest_stats_ny.iloc[japanese_rest_stats_ny['Rating'].idxmax()]
```

```
Borough                      Manhattan
Neighborhood              East Village
ID                5b3805910dd31f002409405a
Name                        Suki Curry
Likes                               57
Rating                             9.4
Tips                                15
Name: 27, dtype: object
```

Resturant with maximum Tips

```
japanese_rest_stats_ny.iloc[japanese_rest_stats_ny['Tips'].idxmax()]
```

```
Borough                      Manhattan
Neighborhood              Midtown South
ID                51e8ce40498ea1fb0180efb2
Name                       Izakaya MEW
Likes                             1054
Rating                             8.8
Tips                               266
Name: 47, dtype: object
```
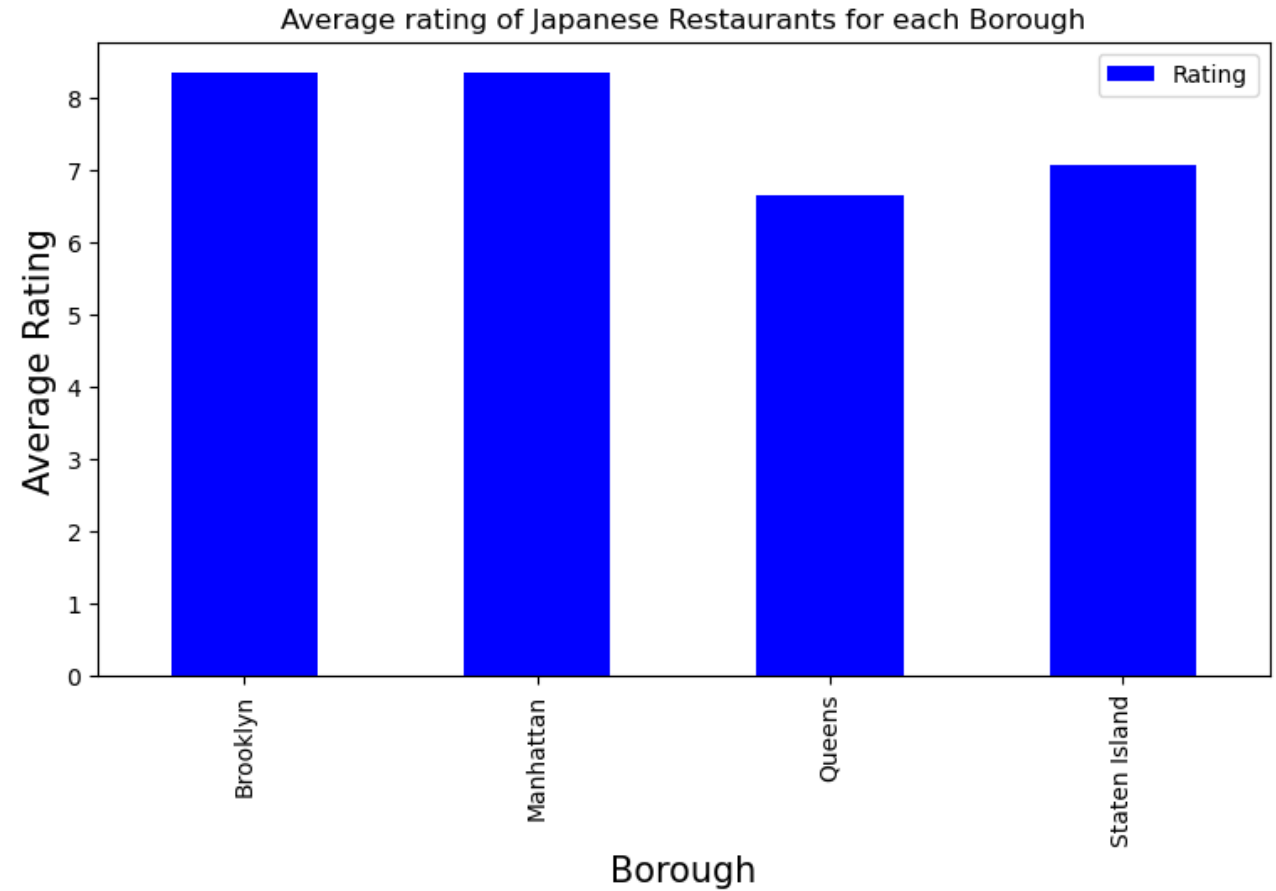
	Neighborhood	Average Rating
10	East Village	9.35
8	Cobble Hill	9.10
30	Park Slope	9.00
29	North Side	8.90
9	Downtown	8.90
1	Boerum Hill	8.80
22	Lindenwood	8.70
34	Soho	8.70
11	Fort Greene	8.60
36	Upper East Side	8.50

There are the top neighborhoods with the highest average ratings of Japanese restaurants.

Results

	Borough	Average Rating
0	Brooklyn	8.360000
1	Manhattan	8.352381
3	Staten Island	7.080000
2	Queens	6.655556

These are the average ratings of Japanese Restaurants for each Borough

We will consider all the neighborhoods with average rating greater or equal 6.0 to visualize on a map

Conclusion

- Brooklyn and Manhattan have the best rated Japanese restaurants.

- Manhattan and Brooklyn are the best locations for Japanese restaurants in New York City.

- Recommend to you investor to open a Japanese restaurant in Brooklyn due to Brooklyn has multiple neighborhoods with average ratings exceeding 7.0