REPORT

INTRODUCTION/BUSINESS PROBLEM

New York City, city and port located at the mouth of the Hudson River, southeastern New York state, northeastern U.S. It is the largest and most influential American metropolis. New York City is in reality a collection of many neighborhoods scattered among the city's five boroughs—Manhattan, Brooklyn, the Bronx, Queens, and Staten Island—each exhibiting its own lifestyle. Moving from one city neighborhood to the next may be like passing from one country to another. New York is the most populous and the most international city in the country. New York is the most ethnically diverse, religiously varied, commercially driven, famously congested, and, in the eyes of many, the most attractive urban centre in the country. For the past two centuries, New York has been the largest and wealthiest American city. New York remains for its residents a conglomeration of local neighborhoods that provide them with familiar cuisines, languages, and experiences. A city of stark contrasts and deep contradictions, New York is perhaps the most fitting representative of a diverse and powerful nation.

Because of such a rich heritage and diverse culture the city has one of the finest ethical restaurants. The final project looks at the city and tries to find the best Japanese Restaurants located in the city. This project deals with answering the question 'where should person 'X' open a new Japanese restaurant?' and 'where should person 'Y' go to have the best Japanese food?'.

DATA

For this Business Problem we shall collect the neighborhood, borough, latitude and longitude, restaurant names, restaurant ratings and tips data of New York City. The data on the neighborhood, boroughs shall be collected from : https://cocl.us/new_york_dataset.

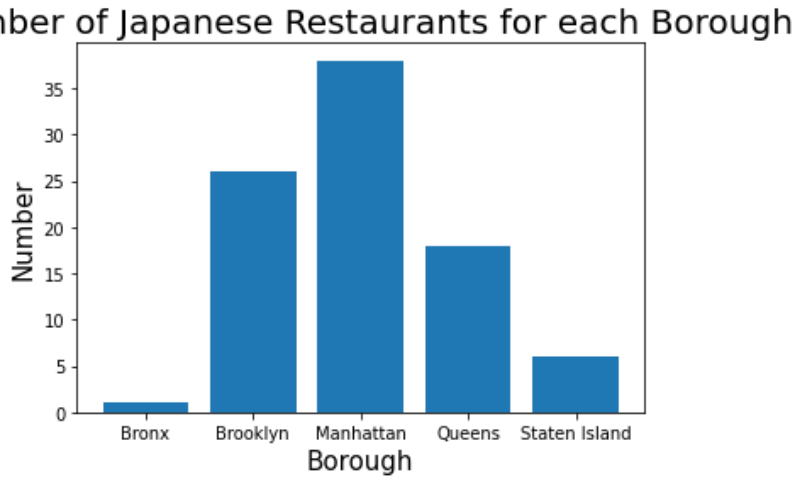
The restaurant details shall be collected by using FourSquare API via the request library in Python.

METHODOLOGY

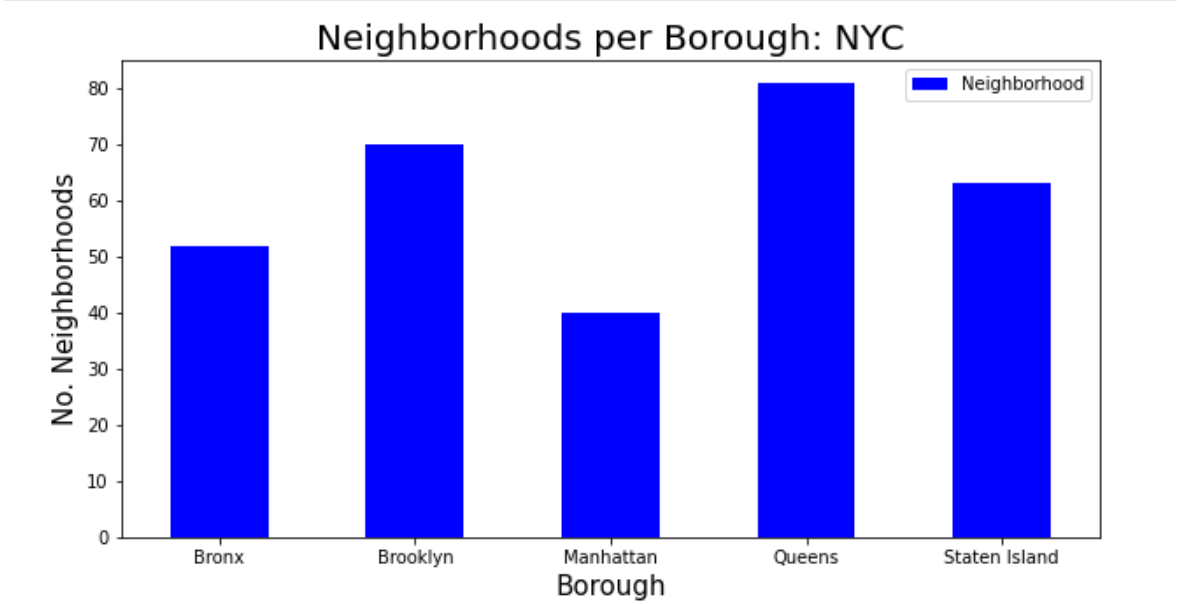
Data will be collected from https://cocl.us/new_york_dataset and cleaned and processed into a dataframe. FourSquare be used to locate all venues and then filtered by Japanese restaurants in each borough for comparison purposes. Ratings by users will be analysed. Data will be sorted based on rankings. Also, Folium shall be used to see the location of the Japanese Restaurants.

RESULTS

We can see that there are very few Japanese Restaurants located in each Borough of New York City, with the minimum number in Bronx and maximum in Manhattan.

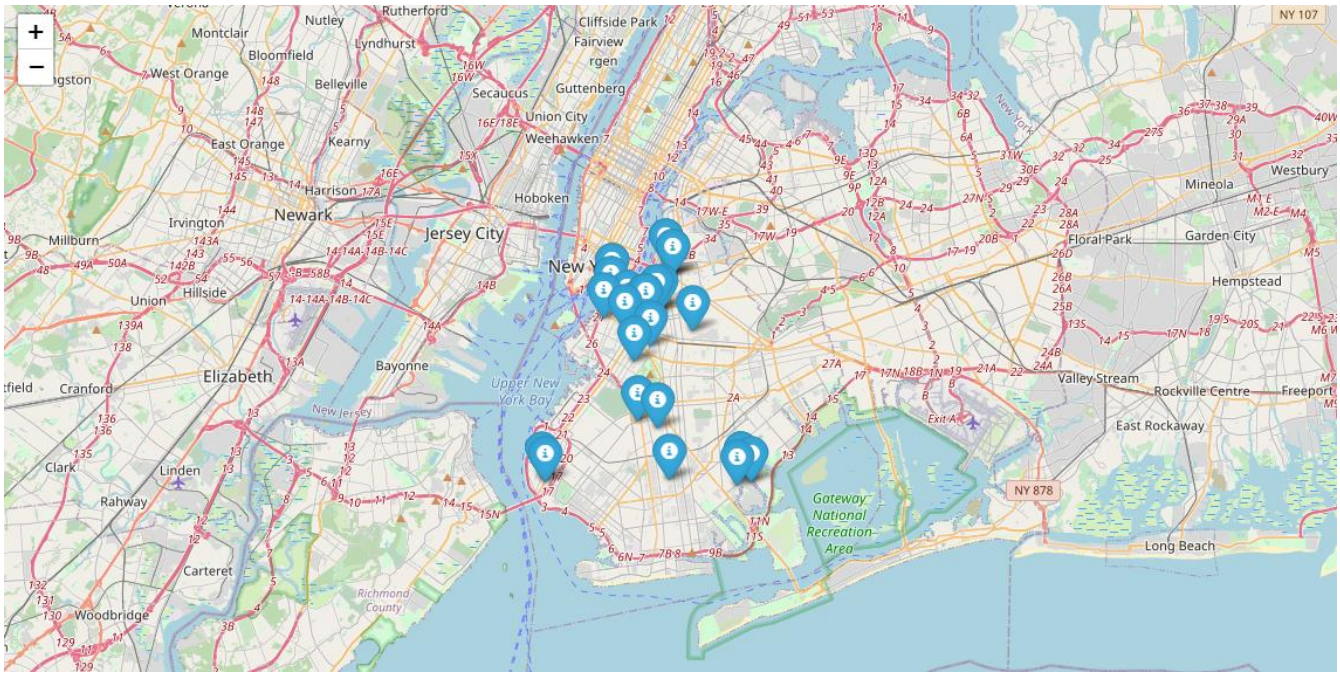


We had also seen that Queens had the maximum number of neighbourhoods followed by Brooklyn.

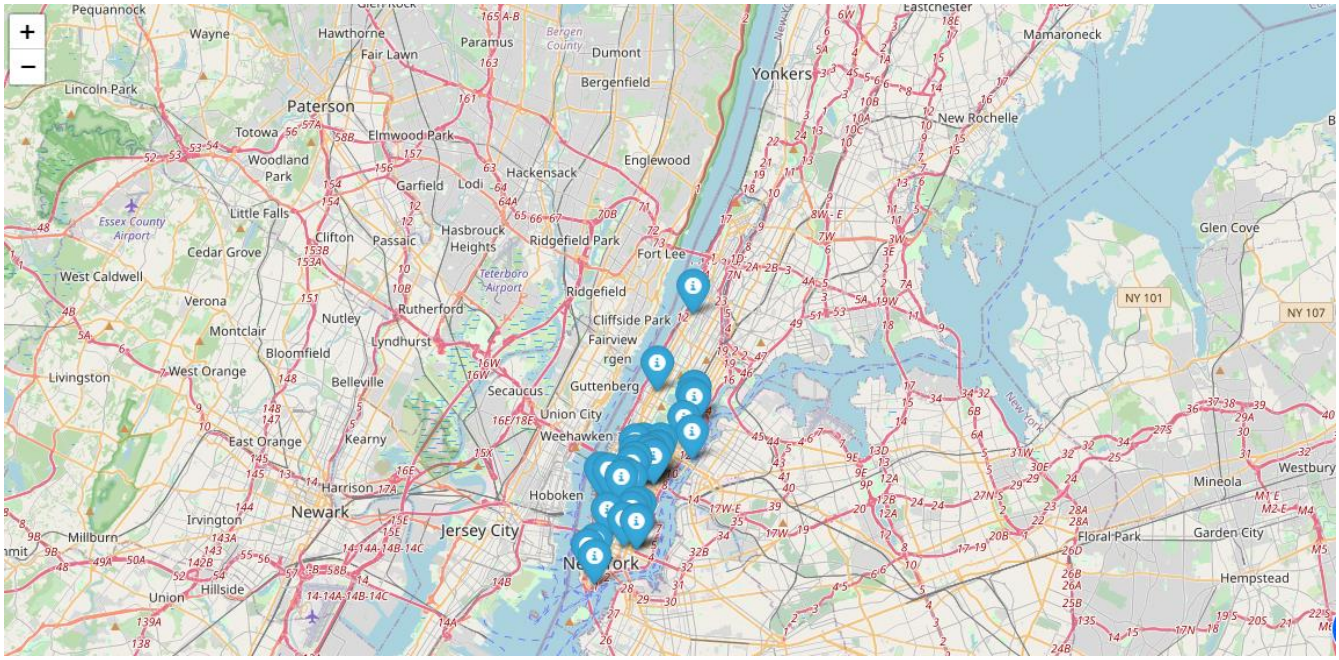


So from the above two graphs we can see that Brooklyn has both a high number of neighbourhoods and also a high number of Japanese Restaurants.

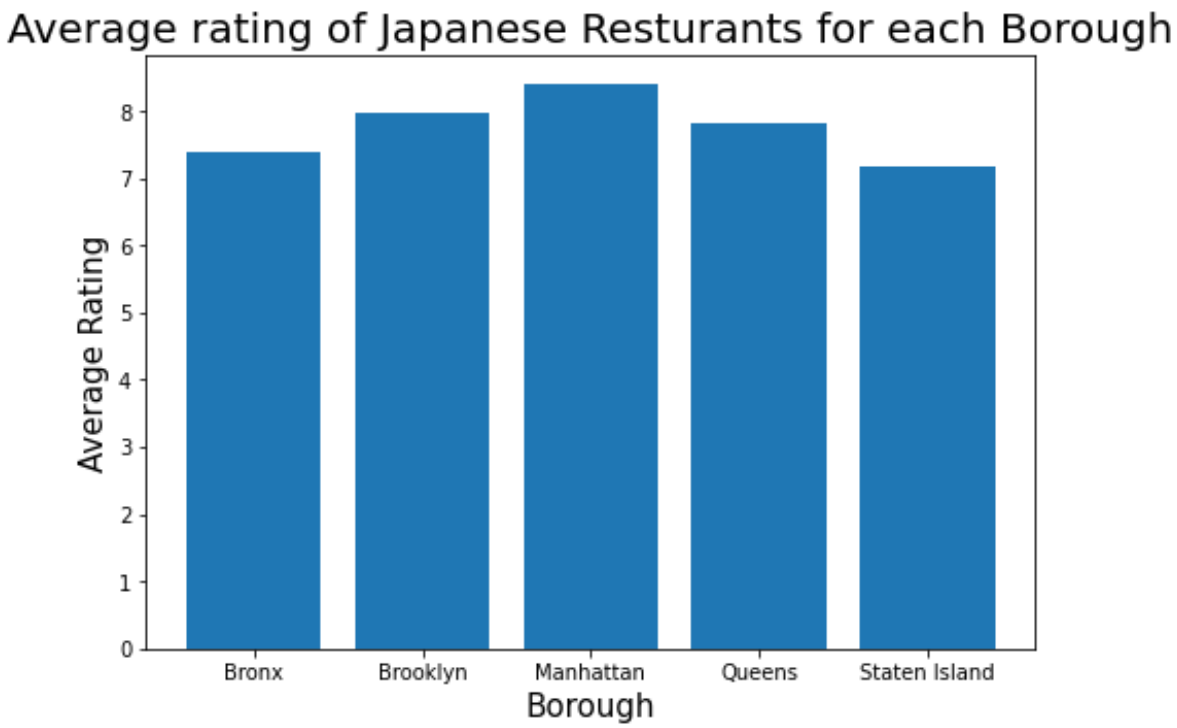
We can see how dense are the Restaurants in Brooklyn.



Location of the restaurants in Manhattan.



On analyzing the ratings, we can see Mahattan has the highest average rating followed by Brooklyn.



DISCUSSION

On looking at the results obtained we can see that Manhattan and Brooklyn would be the best places to open a new restaurant since both these places satisfy the criteria. I would personally prefer Brooklyn since there are more number of neighbourhoods in Brooklyn and less number of Japanese Restaurants than Manhattan, making the market less competitive. Also, the real estate prices in Brooklyn will be much cheaper so my new restaurant would be more profitable.

But for a visitor he would prefer Manhattan because of the large number of options available and also the good ratings.

CONCLUSION

In the project we have gone through understanding the problem and exploring and filtering data accordingly. If person 'X' has to open a new restaurant then he will likely prefer Brooklyn. Whereas a person who wants to eat good Japanese food will go to Manhattan. Though the ultimate decision will depend upon the requirements of the two. This project will help both of them to look at the results and according to their needs choose the location.