

# ***BATTLE OF THE NEIGHBORHOODS (WEEK 2)***

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## ***SOME TRIVIA***

New York City's demographics show that it is a large and ethnically diverse metropolis. It is the largest city in the United States with a long history of international immigration. New York City was home to nearly 8.5 million people in 2014, accounting for over 40% of the population of New York State and a slightly lower percentage of the New York metropolitan area, home to approximately 23.6 million. Over the last decade the city has been growing faster than the region. The New York region continues to be by far the leading metropolitan gateway for legal immigrants admitted into the United States.

Throughout its history, New York City has been a major point of entry for immigrants; the term "melting pot" was coined to describe densely populated immigrant neighborhoods on the Lower East Side. As many as 800 languages are spoken in New York, making it the most linguistically diverse city in the world. English remains the most widely spoken language, although there are areas in the outer boroughs in which up to 25% of people speak English as an alternate language, and/or have limited or no English language fluency. English is least spoken in neighborhoods such as Flushing, Sunset Park, and Corona.

# *INTRODUCTION*

With its diverse culture, comes diverse food items. There are many restaurants in New York City, each belonging to different categories like Chinese, Indian, French etc. So as part of this project, we will list and visualize all major parts of New York City that has great Greek restaurants.

## *Queries that can be answered using this project?*

- *What is best location in New York City for Indian Cuisine ?*
- *Which areas have potential Greek Restaurant Market ?*
- *Which all areas lack Indian Restaurants ?*
- *Which is the best place to stay if I prefer Greek Cuisine ?*

# DATA REQUIRE

## 1. Data source:

[https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset)

Description - his data set contains the required information. And we will use this data set to explore various neighborhoods of new york city. Indian restaurants in each neighborhood of New York city.

## 2. Data source: Foursquare API

Description : By using this API we will get all the venues in each neighborhood. We can filter these venues to get only Indian Restaurants.

## 3. Data source:

<https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm>

Description : By using this geo space data we will get the New York Borough boundaries that will help us to visualize choropleth map.

# *APPROACH*

Collect the New York city data from [https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset)

Using FourSquare API we will find all venues for each neighborhood.

Filter out all venues that are Indian Restaurants.

Find rating , tips and like count for each Indian Restaurants using FourSquare API.

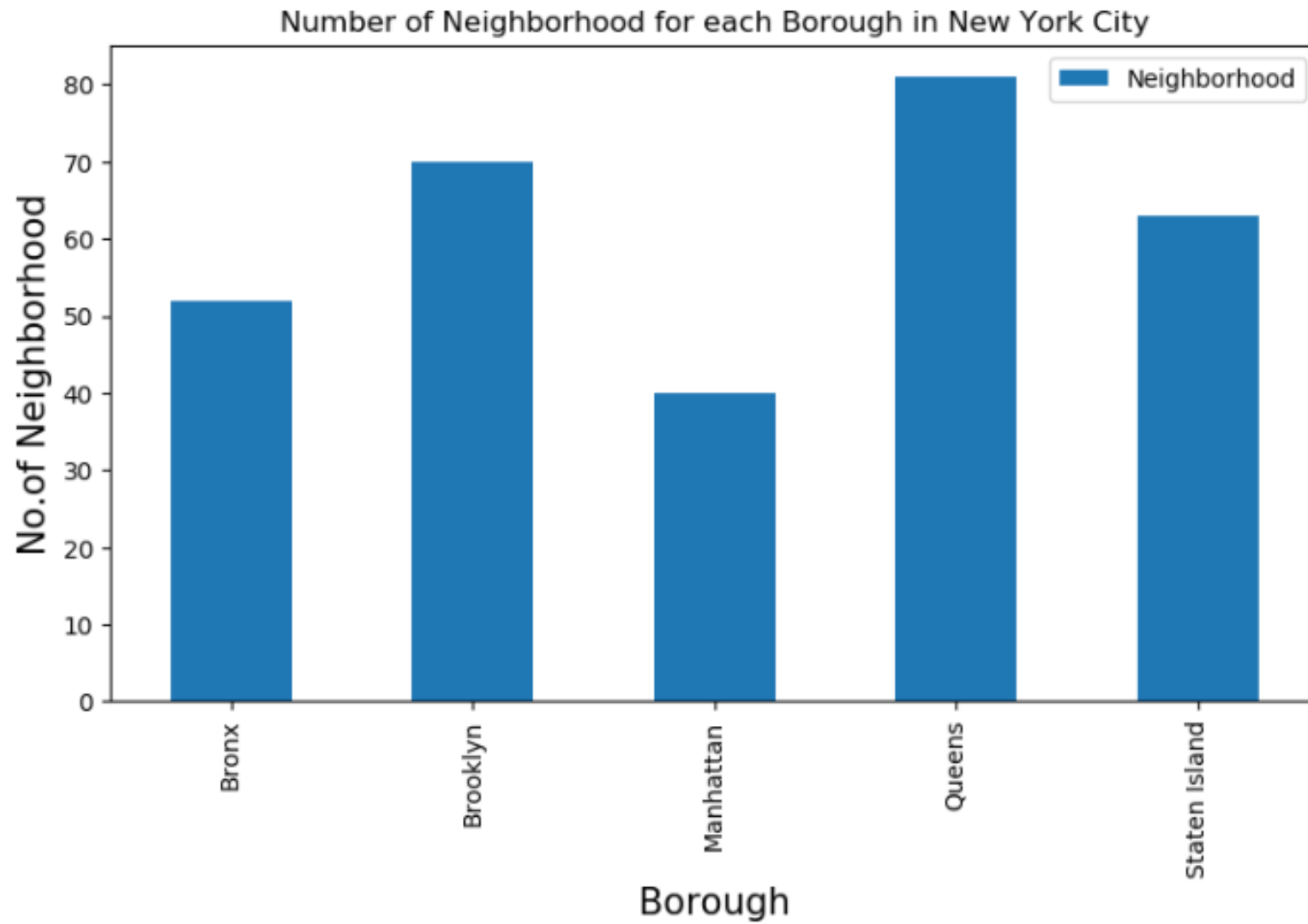
Using rating for each restaurant , we will sort that data.

# ***LIBRARIES***

*Pandas and numpy for handling data.*

*Request module for using FourSquare API.*

*Geopy to get co-ordinates of City of New York.*



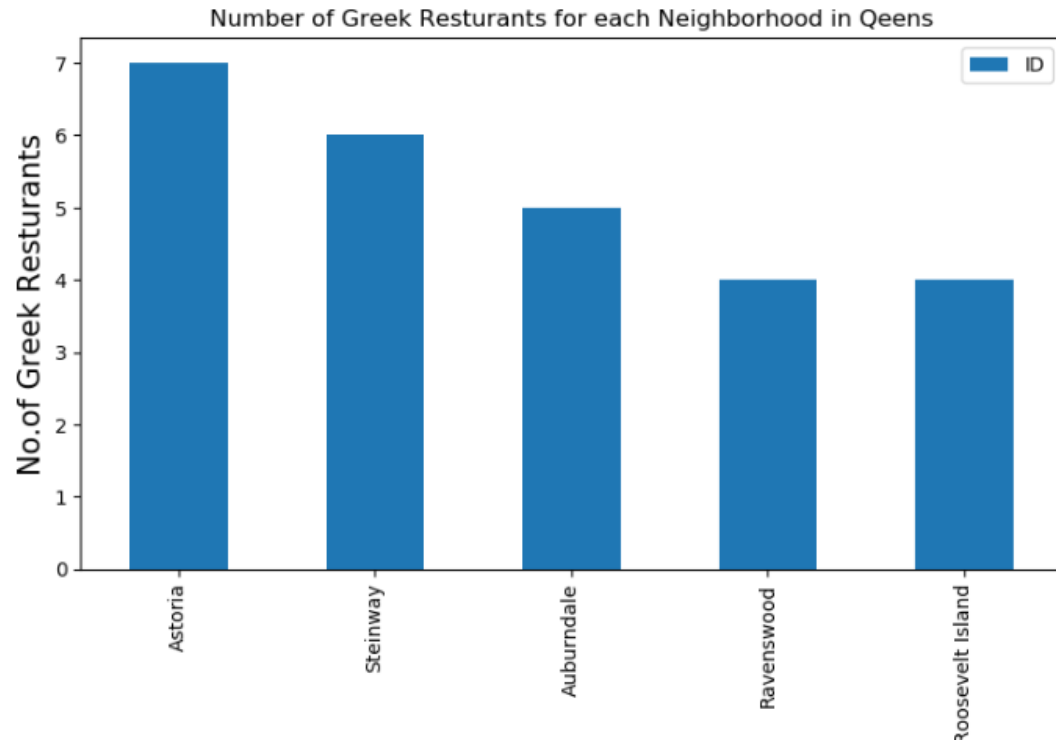


*Filtered out which Borough and Neighborhood have maximum number of Greek Restaurants using FourSquare API.*

**Result** – Queens has maximum number of Restaurants



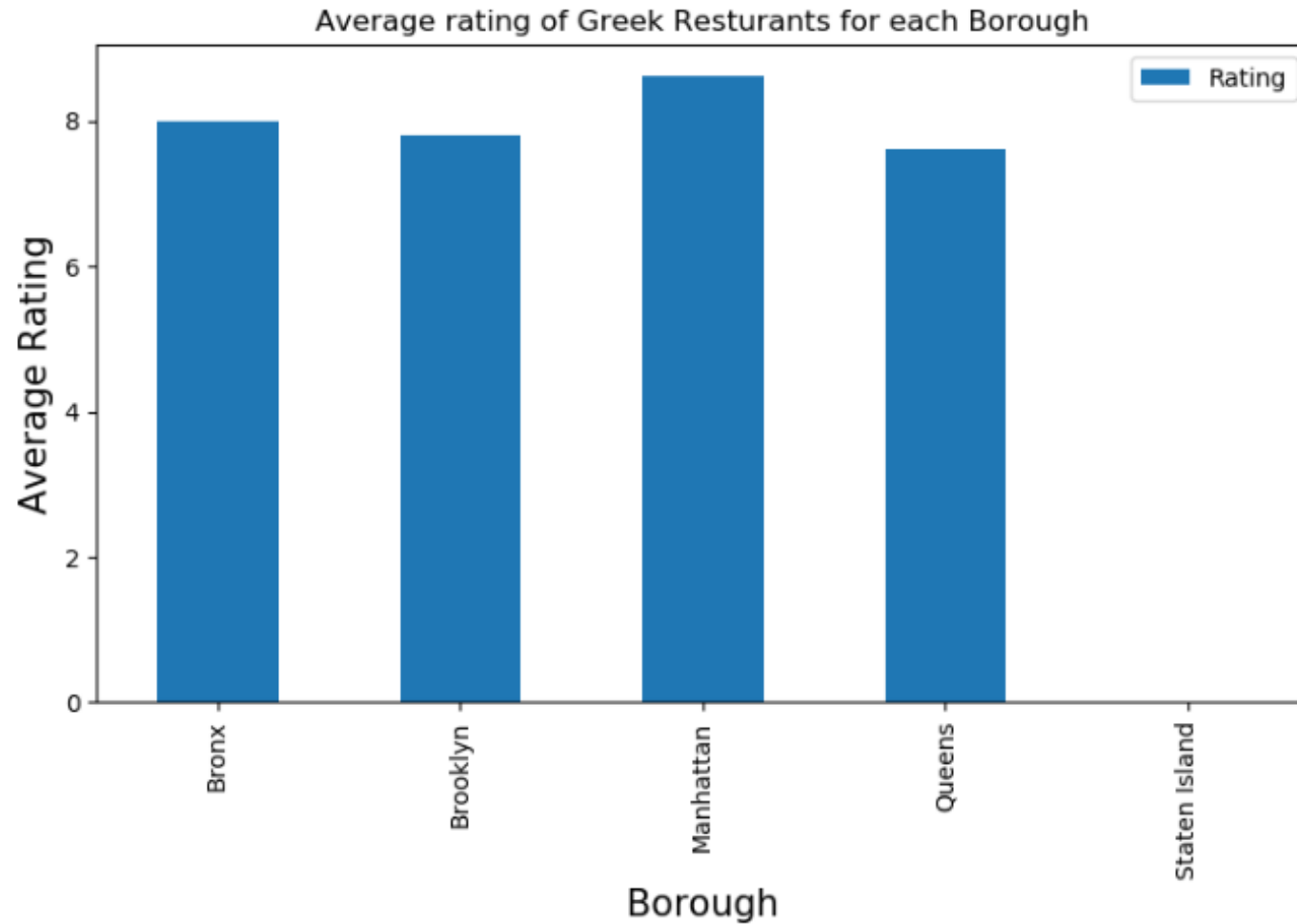
# List of Restaurants in Astoria (Queens)



*Since Queens had the majority of restaurants and taking into account that quantity is a usual measure for an average visitor. I decided to see in which neighbourhood specifically it would make more sense to stay should somebody opted for Queens.*

*However, I decided to go a bit deeper and compare based on average ranking*

	Borough	Neighborhood	ID	Name
31	Queens	Astoria	553ffa91498e2c76f06c0c03	SVL Bar
32	Queens	Astoria	4a7b0eb5f964a520e5e91fe3	BZ Grill
33	Queens	Astoria	59f3b0a2dee770670b00c0a1	Gyro World
34	Queens	Astoria	4b0b36a5f964a520cb2e23e3	Gyro Uno
35	Queens	Astoria	4aa840a9f964a520665020e3	Ovelia Psistaria Bar
36	Queens	Astoria	4a9b2269f964a520863420e3	Stamatis
37	Queens	Astoria	48a7dcf0f964a520a0511fe3	Telly's Taverna



*Calculated the average rating of the restaurants grouped by Boroughs.*

**Result** – Manhattan has the restaurants with the highest average rating

# MAXIMUM LIKES

```
1 # Resturant with maximum Likes
2 greek_rest_stats_ny.iloc[greek_rest_stats_ny['Likes'].idxmax()]
```

Borough	Manhattan
Neighborhood	Chinatown
ID	5521c2ff498ebe2368634187
Name	Kiki's
Likes	825
Rating	9.1
Tips	204
Name: 17, dtype: object	

# HIGHEST RATING

```
1 # Resturant with maximum Rating
2 greek_rest_stats_ny.iloc[greek_rest_stats_ny['Rating'].idxmax()]
```

```
Borough      Queens
Neighborhood  Steinway
ID            4b491ca9f964a520586626e3
Name          Loukoumi Taverna
Likes         98
Rating        9.2
Tips          42
Name: 51, dtype: object
```

# *CONCLUSION*

- *Chinatown (Manhattan), East Village (Manhattan) and Gramercy (Manhattan) are some of the best neighborhoods for Greek cuisine.*
- *Manhattan is the best place to stay if you prefer Greek Cuisine.*
- *Bronx and Staten Island lack Greek cuisine among other Boroughs*
- *The analysis went well, but not taking into account factors like prices or accessibility. These are both factors that could alter the conclusions entirely for those interested in tasting Greek cuisine in New York.*

***THANK YOU***