

The Battle of Neighborhoods

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Finding best place to open an indian
restaurant in New York City

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Introduction:

New York is one of the biggest cities in the United States, also New York is the most populous city in the United States. It has a population of 18.8 million. NYC has five districts: the Bronx, Brooklyn, Manhattan, Queens and Staten Island each with dozens of neighborhoods lending their own local flavor.

Business Problem:

Our client is an Indian investor who wants to open a new restaurant in NYC. He has approached us to study the market and suggest a location in one of the neighbourhoods which would be best for a new Indian restaurant. Our main objectives of this project would be to extract and analyse right data about various neighbourhoods of Cairo using various data science techniques and suggest to our client a fitting location for his pharmacy.

Data:

We will use :

- Geographical coordinates of the neighbourhoods. [\[link\]](#)
- Venue data from FourSquare. [\[link\]](#)

Methodology:

1. First step we will load NYC Data

```
In [10]: NYC = getNYC()  
NYC.head()
```

```
Out[10]:
```

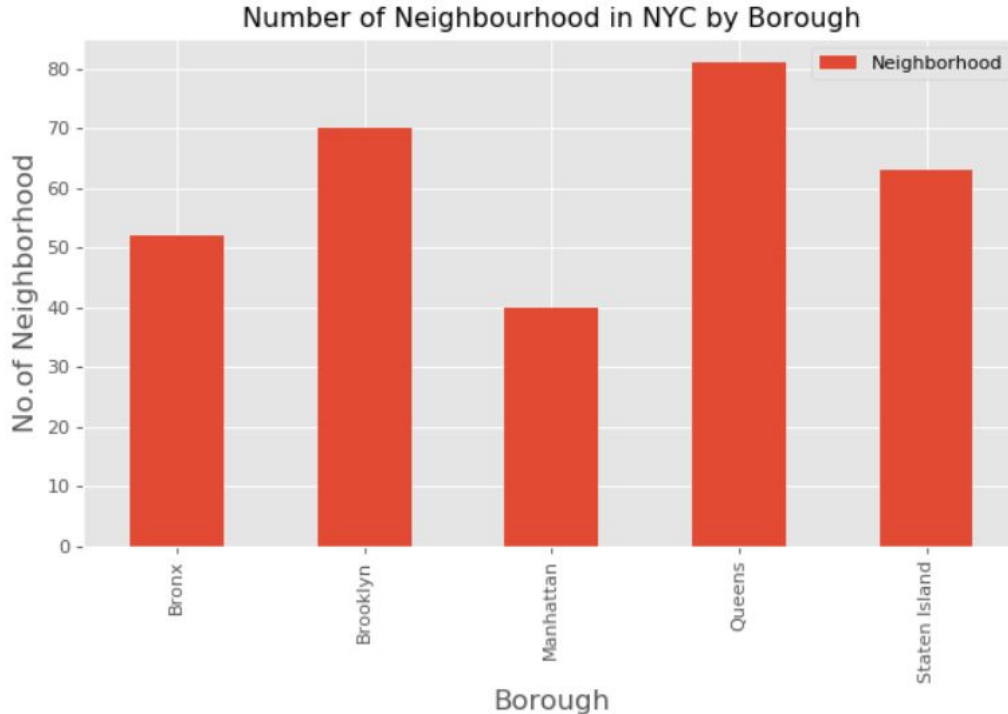
	Borough	Neighborhood	Latitude	Longitude
0	Bronx	Wakefield	40.894705	-73.847201
1	Bronx	Co-op City	40.874294	-73.829939
2	Bronx	Eastchester	40.887556	-73.827806
3	Bronx	Fieldston	40.895437	-73.905643
4	Bronx	Riverdale	40.890834	-73.912585

```
In [11]: NYC.shape
```

```
Out[11]: (306, 4)
```

There are 306 different Neighborhoods in New York to select from

2. Get no. of neighbourhood in each borough



Queens is the most densely populated borough in New York City with 80 neighborhoods

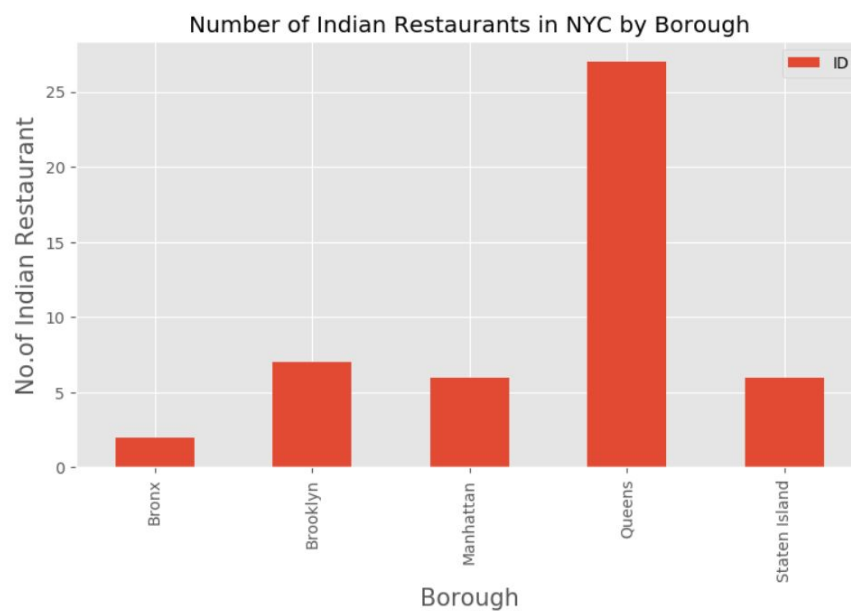
3. Prepare neighborhood list that contains indian restaurant

	Borough	Neighborhood	ID	Name
0	Bronx	Woodlawn	4c0448d9310fc9b6bf1dc761	Curry Spot
1	Bronx	Concourse	551b7f75498e86c00a0ed2e1	Hungry Bird
2	Brooklyn	Brighton Beach	4af0d31bf964a5207ddf21e3	Pak Nasheman
3	Brooklyn	East Flatbush	512a9ea9e4b004fb8eeb84e5	Silver Krust
4	Brooklyn	Prospect Lefferts Gardens	4bb93b70cf2fc9b6fe64a002	Gandhi Fine Indian Cuisine

```
indian_rest_ny.shape
```

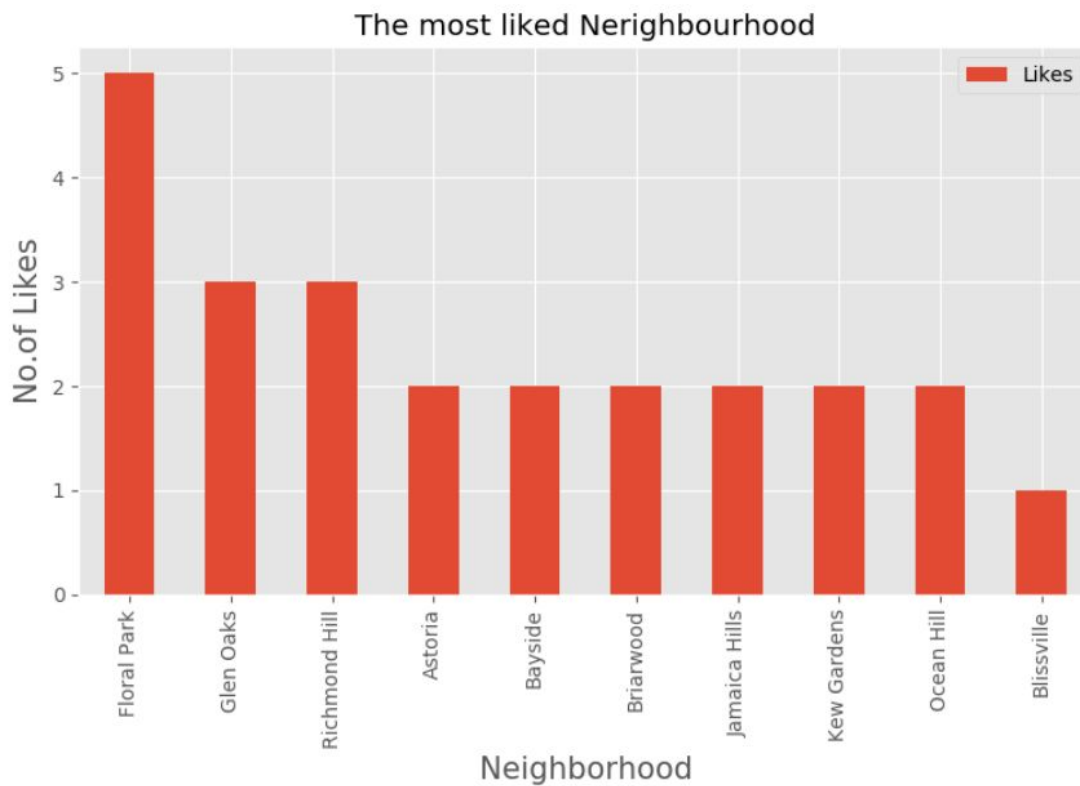
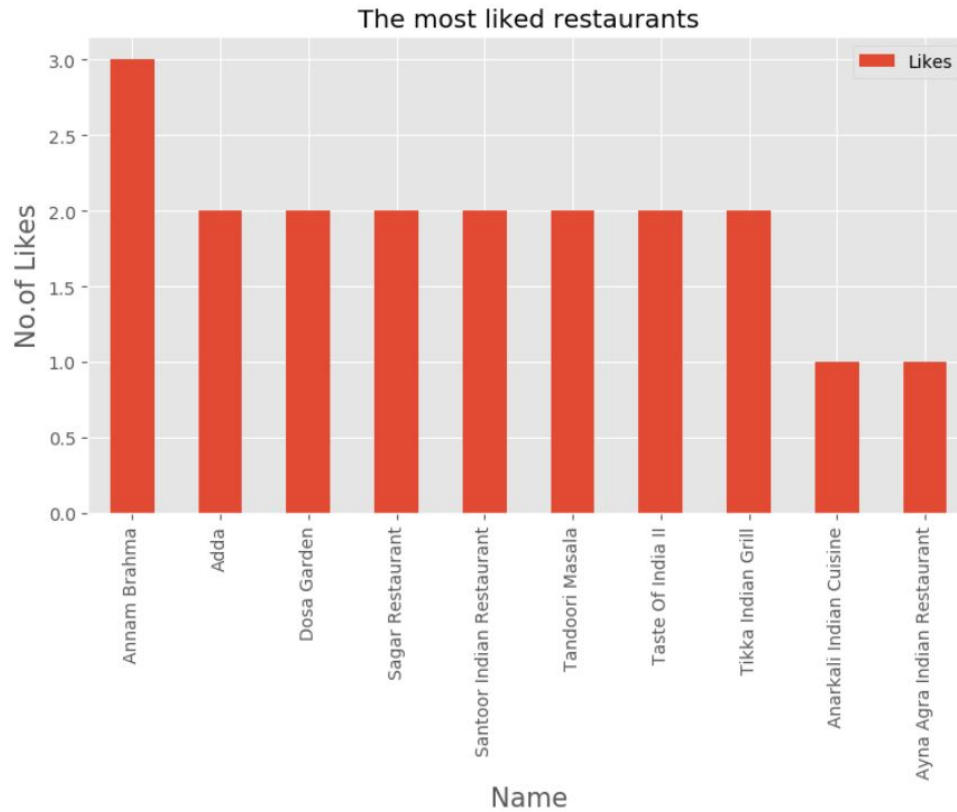
(48, 4)

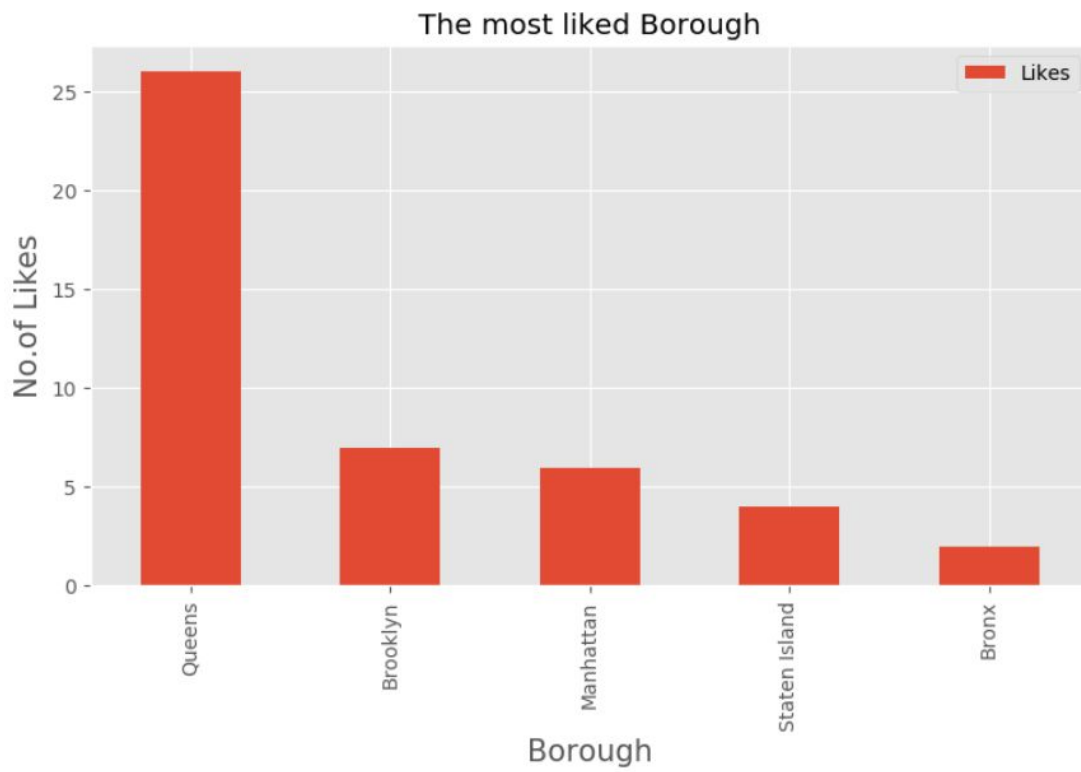
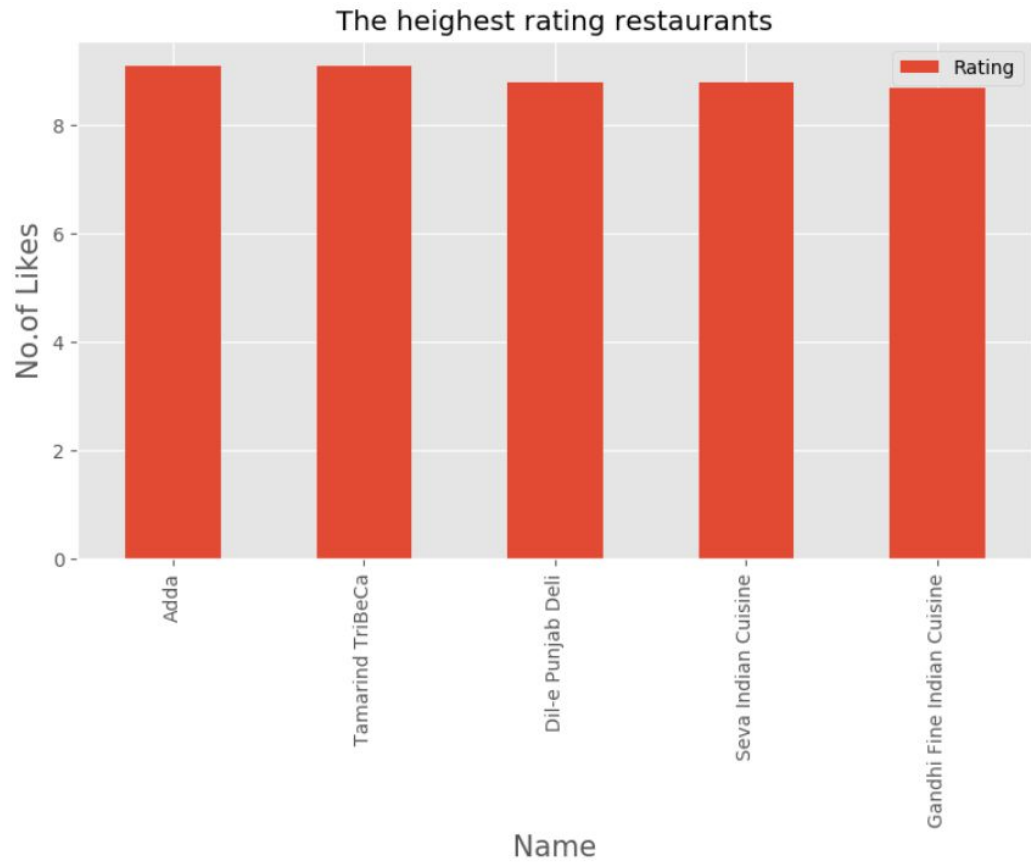
4. Get Number of Indian Restaurants in NYC by Borough

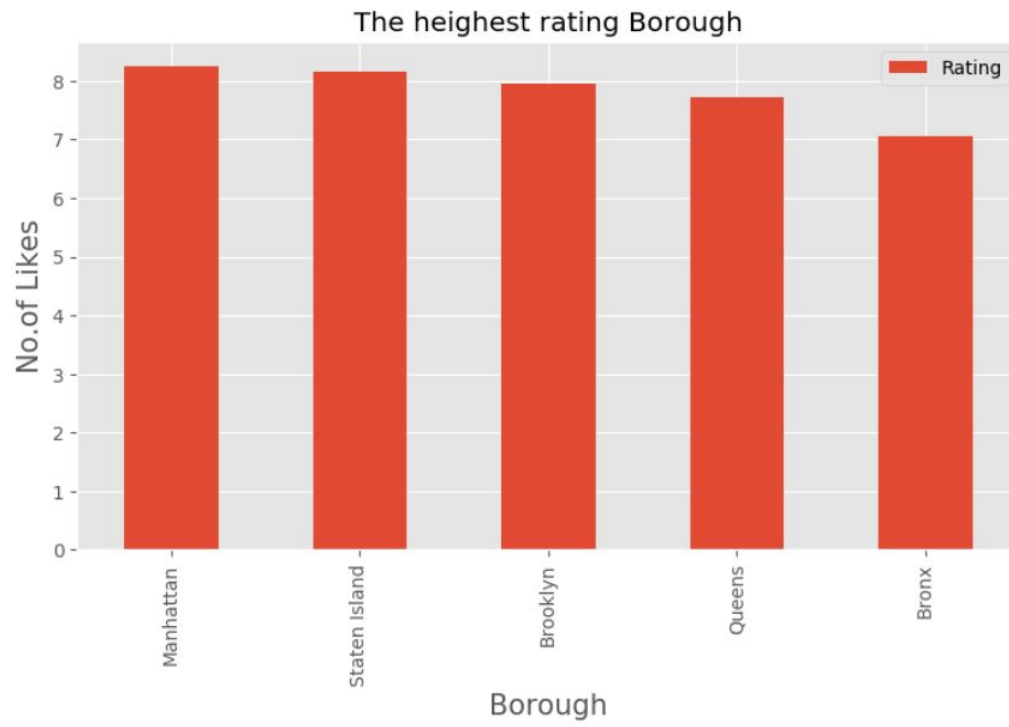


It is noted that Queens has the highest number of Indian Restaurants, about 27 Restaurant

5. Some Investigation to the data

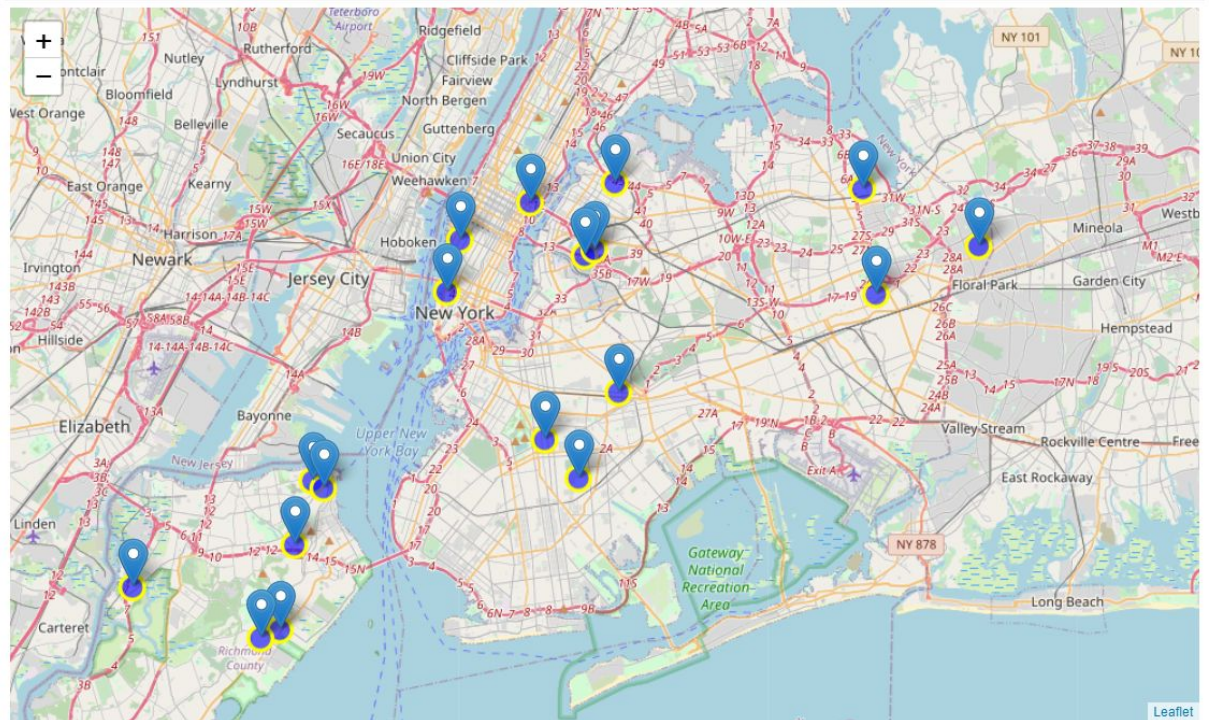






Plotting the map to highest rating neighbourhood

Out[100]:



Discussion and Results:

Our analysis show that there is a lot of indian resteraunts in New York, some of NYC boroughs have more restaurants than others, 'Queens' has the most indian restaurants, 'Annam Brahma' the most liked restaurants, 'Floral Park' is the most Liked Neighbourhood, 'Adda' has the highest rating, 'Manhattan' borough has the highest rating.

Conclusion:

Midtown or Tribeca in Manhattan would be the best choice to start a restaurant given that

1. it is the third most populous urban area in New York City (NYC).
2. it has a population density of 27,826 people per square km, highest of any borough in the United States.
3. it has some of the top rated Indian restaurants located in that area
4. It has the second highest Asian ethnic minority population in NYC.