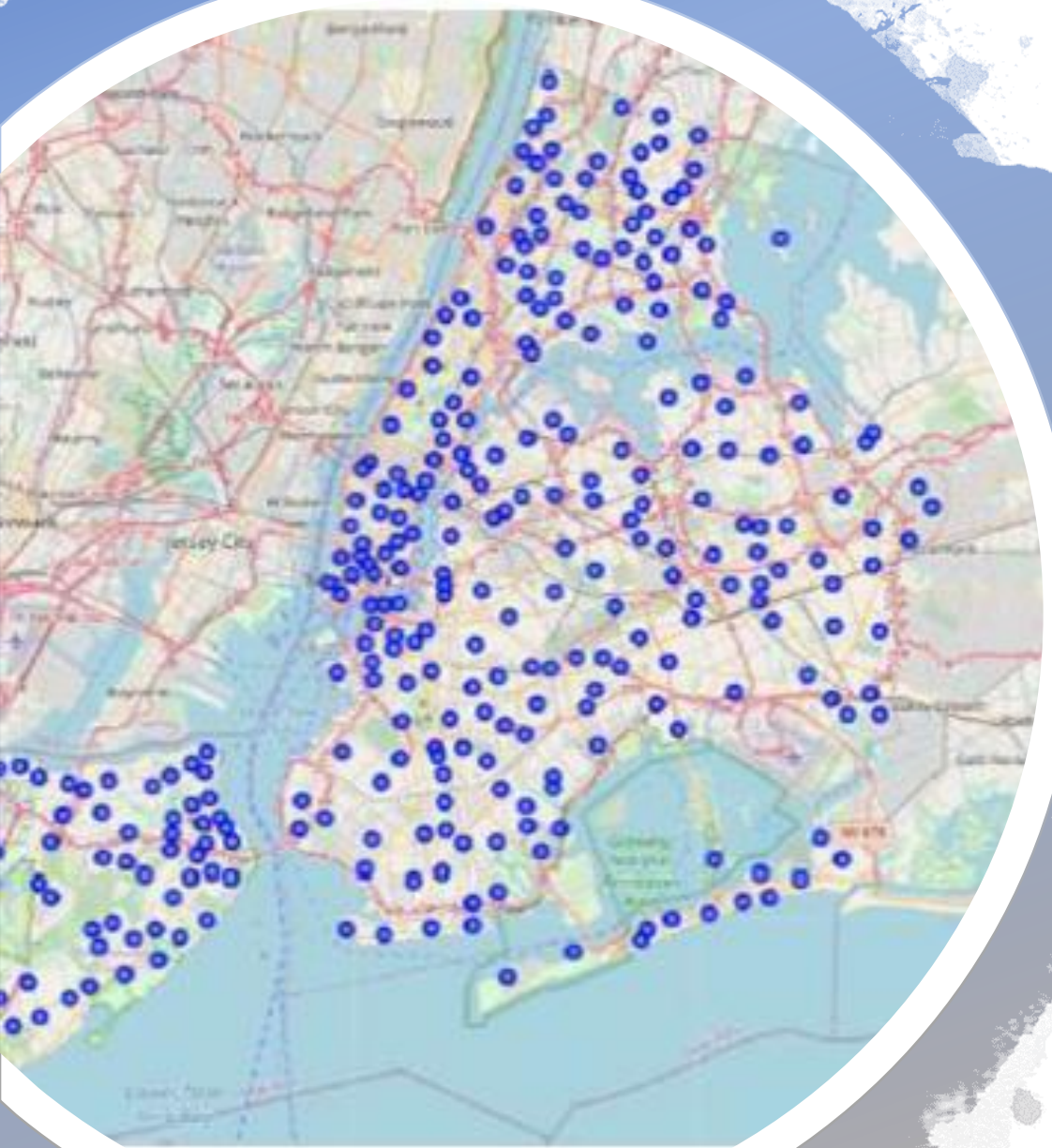# Big Apple Burgers

Applied Data Science Capstone Project

Introduction/Business Problem

- Burgers are comforting foods and come in very handy while you are travelling a city and want to have a quick bite. One of the busiest cities in the world -New York is bound to have decent proportion of burger food joints to cater to its masses. The aim of this project is to identify and direct tourist and foodies to popular burger places in NYC.

- To complete this project the questions that one can answer are:
    1. Which Burger Joints are present in New York City.
    2. Which Borough and Neighborhood have the highest concentration of Burger Joints.
    3. Identify the Neighborhoods with top average ratings for Burger Joints
    4. Which Burger Joints have the highest ratings (Based on "Likes", "Ratings" and "Tips")
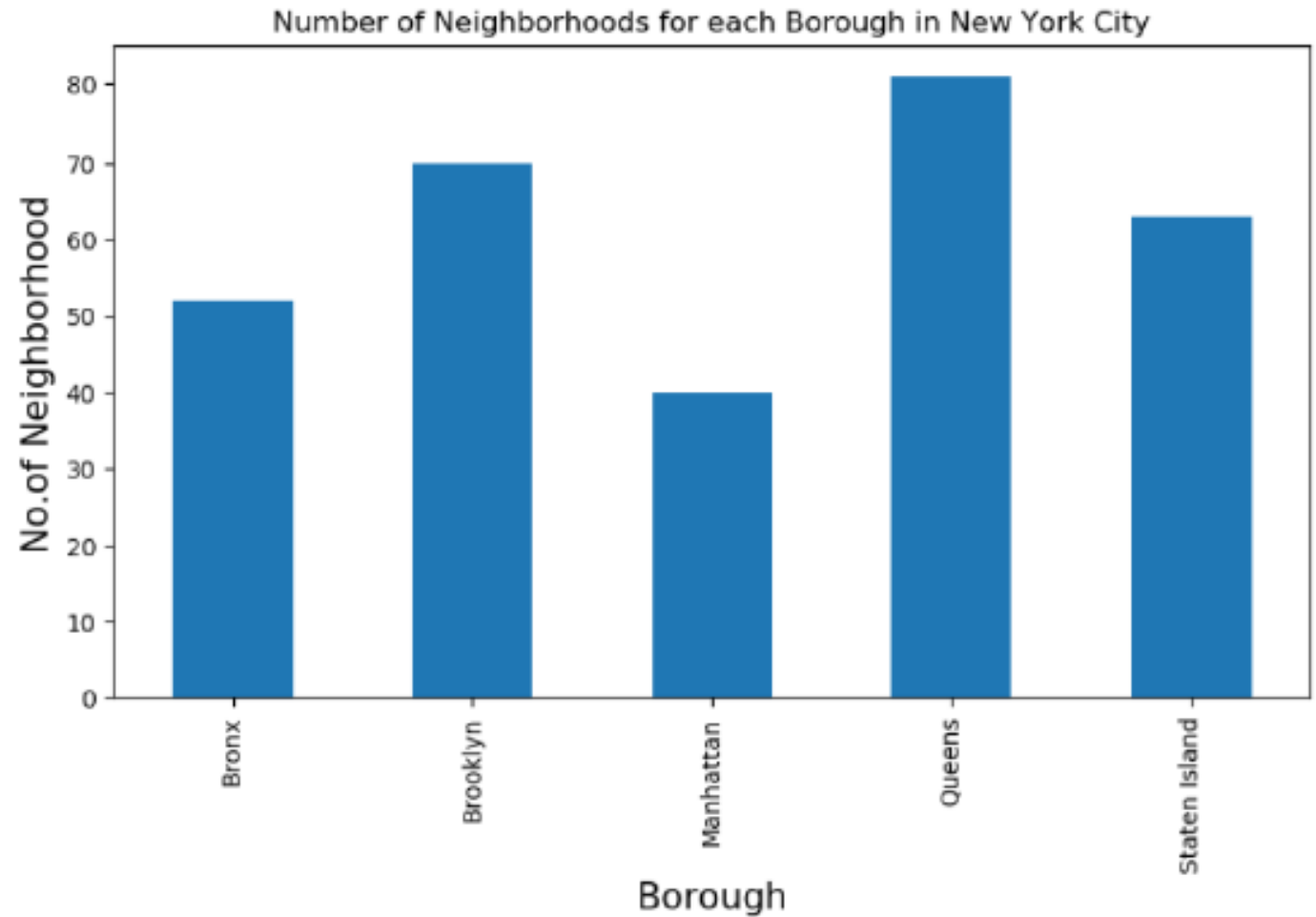
Data Requirements

- Data on the 5 boroughs as well as the neighborhoods that exist in each borough. The latitude and longitude coordinates of each neighborhood are required as well. This information will be obtained from https://cocl.us/new_york_dataset.

- Detailed information on Burger joints in New York City. This will be obtained from Foursquare. Foursquare will be able to provide us with detailed information of all the burger joints in New York such as location, ratings, likes, reviews, tips, etc.

- By merging both sources of information we will be able to obtain the information required to solve the business problem/questions.
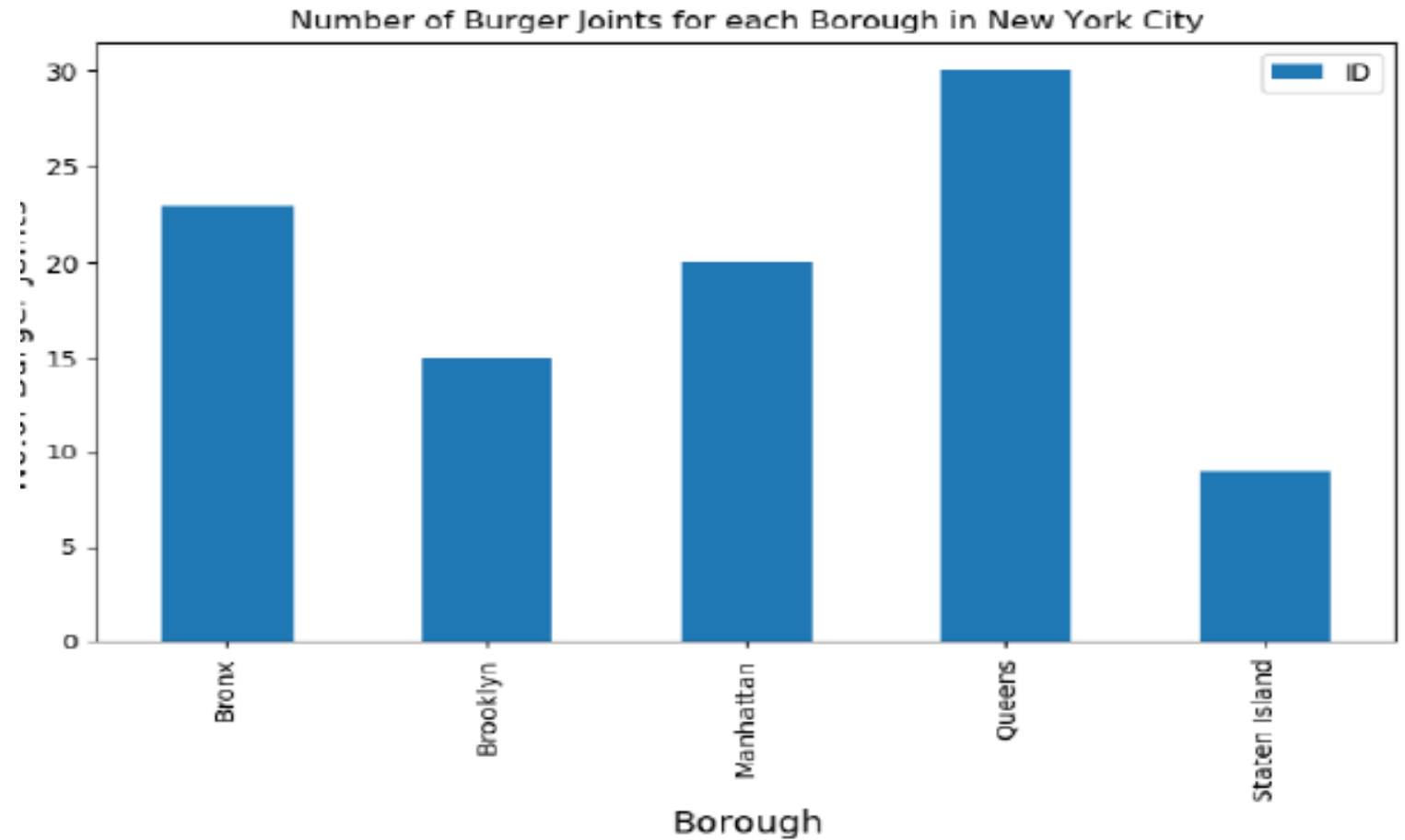
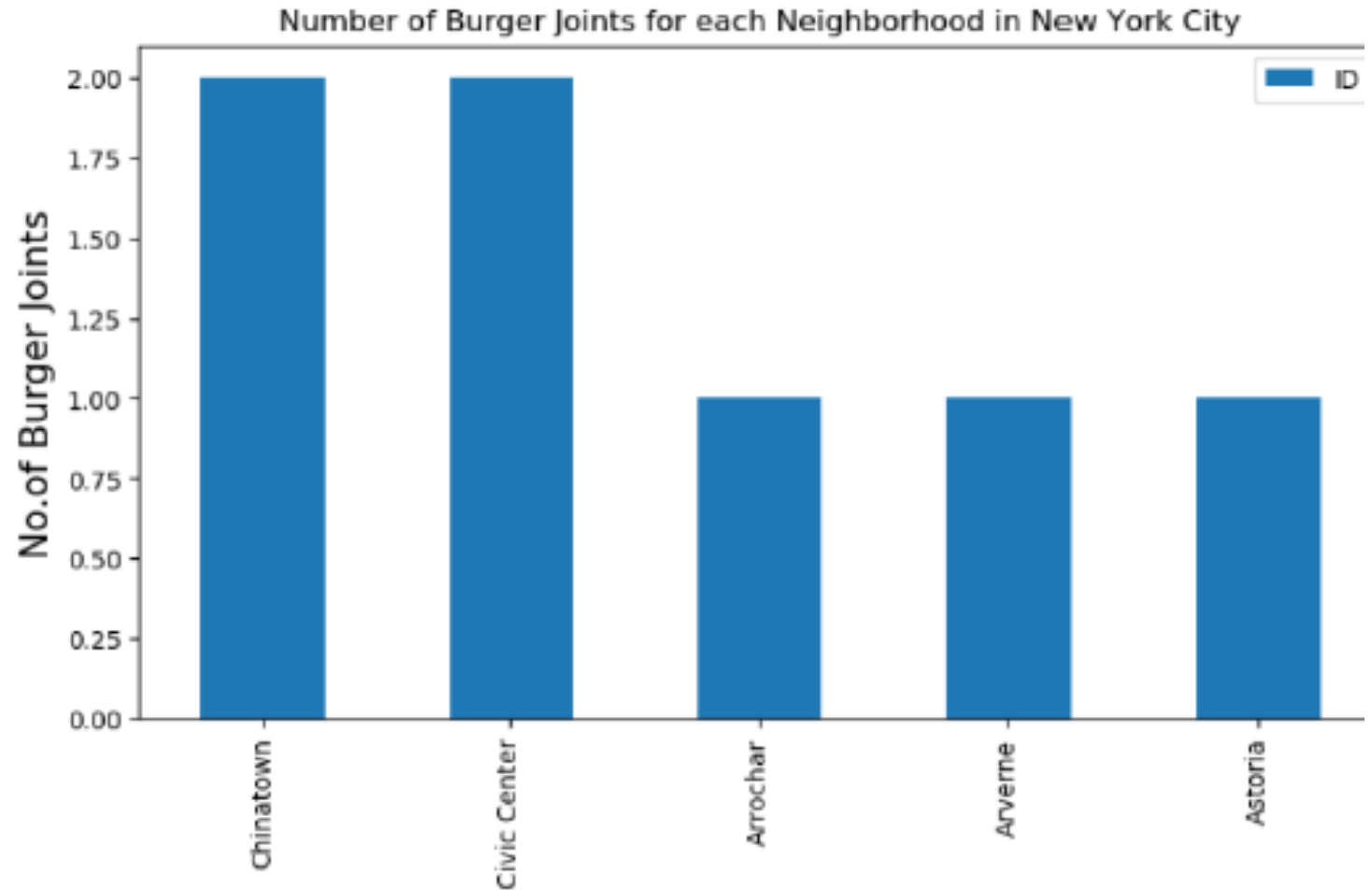New York has 5 Boroughs and 306 Neighborhoods

Queens has the greatest number of Neighborhoods

There are 97 Burger Joints in NYC

Chinatown and Civic Center have the greatest number of Burger Joints

Identifying the top-ranking burger joint based on Likes, Tips and Ratings

Identifying which burger joint ranks first in terms of 'Likes'

```
[91]: burger_joints_stats_ny.iloc[burger_joints_stats_ny['Likes'].idxmax()]
```

```
Out[91]: Borough                              Queens
         Neighborhood                         Corona
         ID              3fd66200f964a52096e91ee3
         Name                          Corner Bistro
         Likes                                  1065
         Rating                                  8.3
         Tips                                    392
         Name: 49, dtype: object
```

Identifying which burger joint ranks first in terms of 'Tips'

```
2]: burger_joints_stats_ny.iloc[burger_joints_stats_ny['Tips'].idxmax()
```

```
:[92]: Borough                              Queens
       Neighborhood                         Corona
       ID              3fd66200f964a52096e91ee3
       Name                          Corner Bistro
       Likes                                  1065
       Rating                                  8.3
       Tips                                    392
       Name: 49, dtype: object
```

Identifying which burger joint ranks first in terms of 'Ratings'

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

```
3]: Borough                               Brooklyn
    Neighborhood                       Williamsburg
    ID              5787b68e498efcabbebba4f8
    Name                            Shake Shack
    Likes                                    505
    Rating                                   8.7
    Tips                                      80
    Name: 23, dtype: object
```

	Borough	Average Rating
4	Staten Island	8.200000
1	Brooklyn	7.653333
2	Manhattan	6.945000
3	Queens	6.090000
0	Bronx	3.778261

Staten Island is the borough with the highest average burger joint rating

Top 10 Neighborhoods in terms of average burger joint ratings

	Neighborhood	Average Rating
	Ridgewood	8.7
	Williamsburg	8.7
	Forest Hills Gardens	8.7
	North Side	8.7
	Hollis	8.7
	Battery Park City	8.7
	Financial District	8.7
	East Williamsburg	8.7
10	Briarwood	8.7
46	Jamaica Hills	8.7

Conclusion

Answers to previously raised questions-

1. There are 97 burger joints across NYC

2. Borough that have the highest concentration of Burger Joints is Queens & Neighborhoods that have the highest concentration of Burger Joints are Chinatown and Civic Center

3. Multiple neighborhoods are tied at 8.7 rating for the best burger joints

4. The best burger joint in terms of likes and tips is the Corner Bistro located in Corona, Queens while the best burger joint in terms of rating is Shake Shack located in Williamsburg, Brooklyn