



# Capstone Project - The Battle of Neighbourhoods

*Japanese Restaurants in New York City*





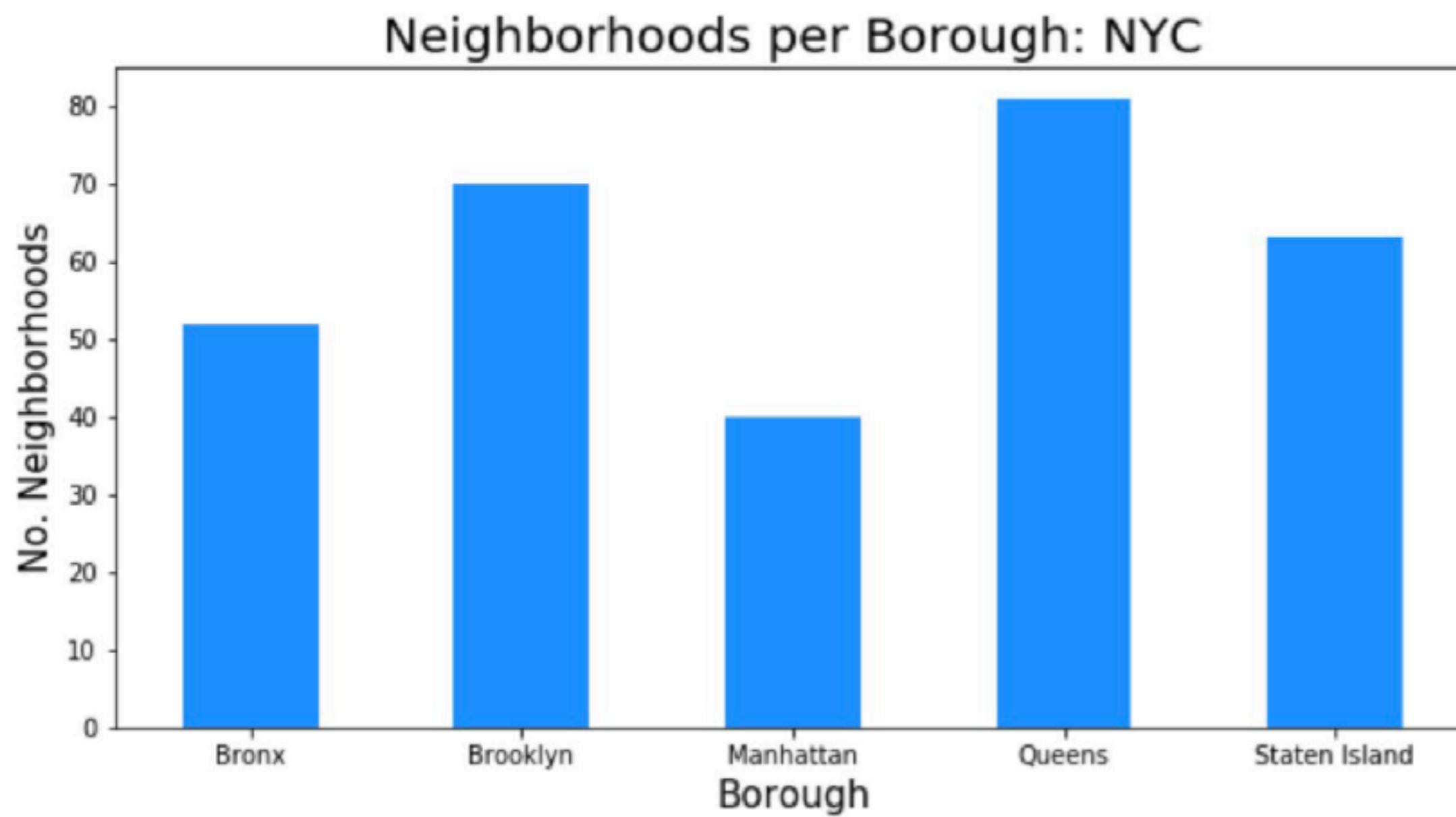
NYC is home to more than 24,000 eating and drinking establishments.

I am going to explore the best places for Japanese Restaurants in New York City. One of world wide Japanese company is willing to open new restaurant there. Thus, it want to understand locations better through exploring neighbourhoods and boroughs. Firstly, I want to know a number of Japanese Restaurants in New York City. Secondly, I need to understand qualities (ratings) of such a Restaurants there. Additionally, I will attempt to answer the questions “Where should I open a Japanese Restaurant?” and “Where should I stay If I want great Japanese food?”

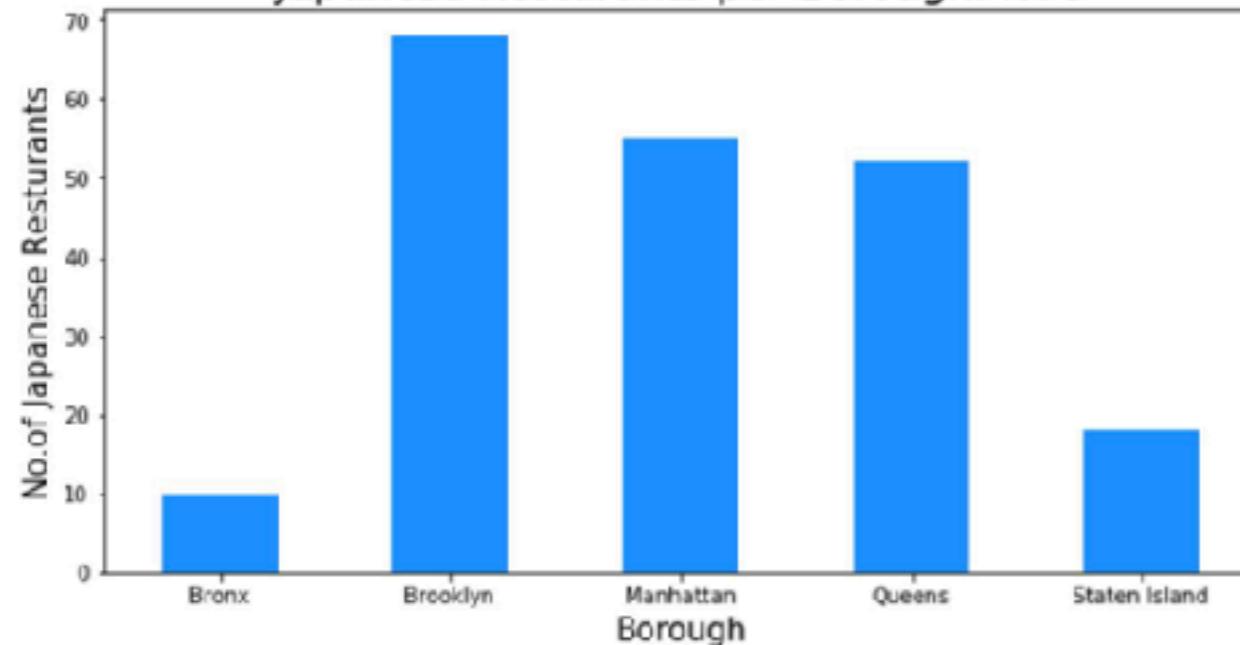
1. What is / are the best location(s) for Japanese cuisine in New York City?
2. In what Neighborhood and/or borough should I open a Japanese restaurant to have the best chance of being successful?
3. Where would I go in New York City to have the best Japanese food?



We can see below that Manhattan has the least number of neighborhoods in all five boroughs.



Japanese Restaurants per Borough: NYC

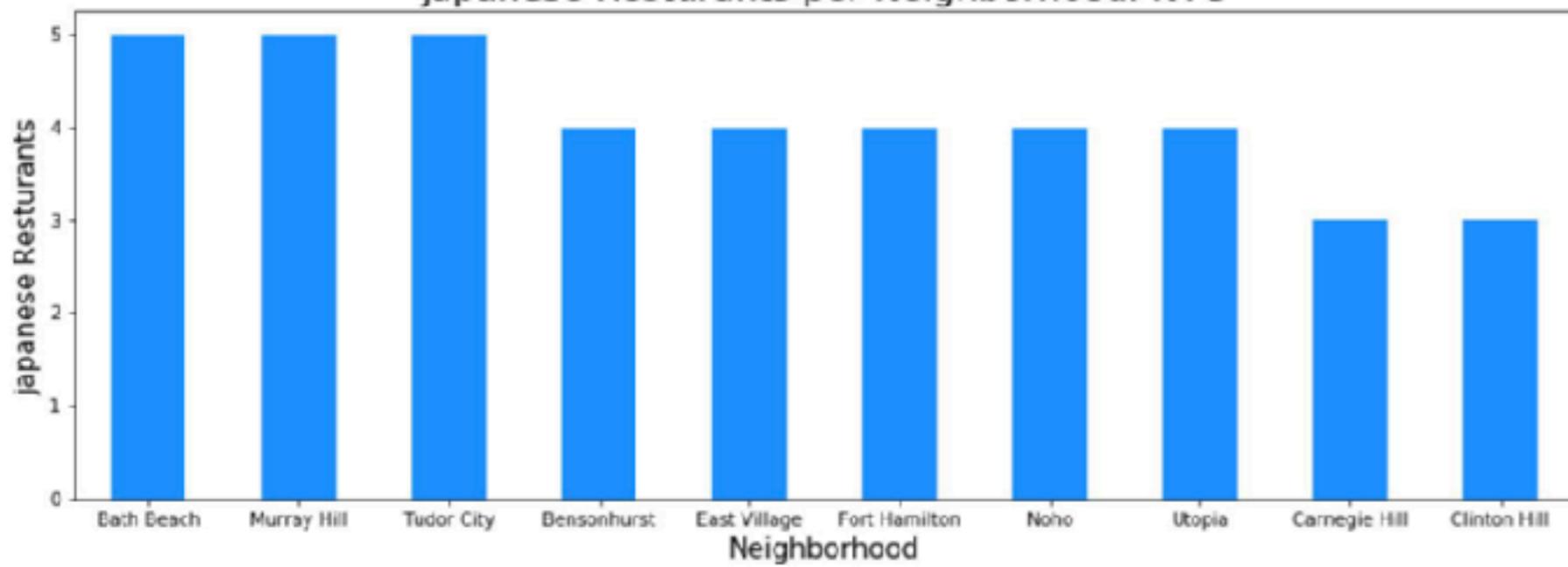


As we continue our analysis, we see below that Brooklyn has the highest number if Japanese restaurants.

Additionally, we see how many restaurants the top 10 neighborhoods have.

The neighborhoods of Bath Beach, Murray Hill, and Tudor City have the highest number of Japanese restaurants in all of NYC.

japanese Restaurants per Neighborhood: NYC



Let's obtain ratings, likes, and tip for Japanese restaurants

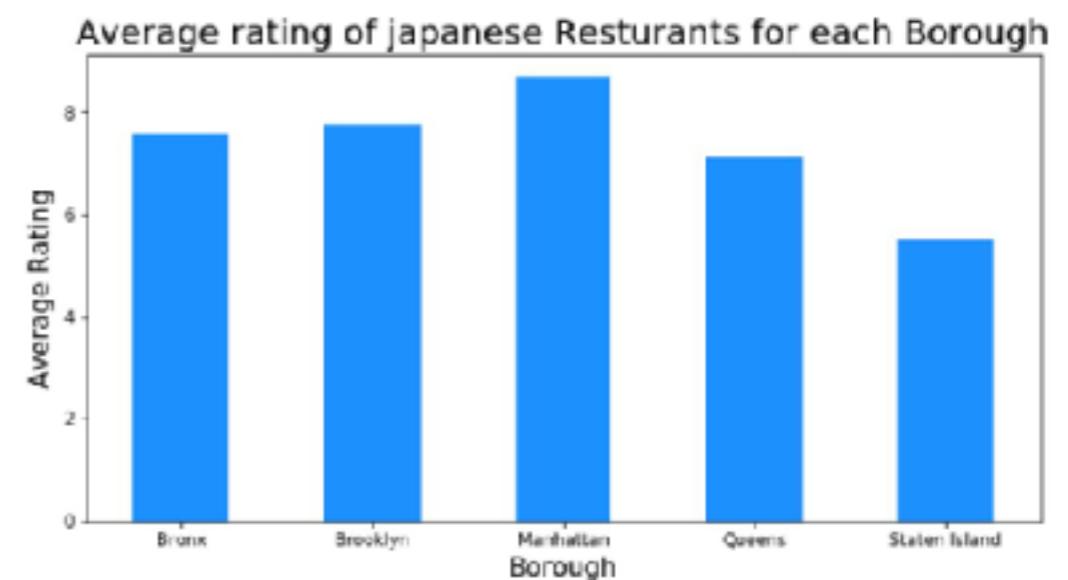
Borough	Neighborhood	ID	Name	Likes	Rating	Tips	
0	Bronx	Riverdale	503cff4e4b066d39de5005a	Aoyu Japanese Restaurant	32	9.2	19
1	Bronx	Riverdale	4b0b311af964a520642e23e3	Palace of Japan	38	8.5	26
2	Bronx	Kingsbridge	503cff4e4b066d39de5005a	Aoyu Japanese Restaurant	32	9.2	19
3	Bronx	Kingsbridge	4b0b311af964a520642e23e3	Palace of Japan	38	8.5	26
4	Bronx	City Island	4dbdf3d790a02849cbd675be	Ohana Japanese Habachi Seafood & Steakhouse	33	7.5	18

Additionally, we find out the best 10 neighborhoods and boroughs by average rating of Japanese restaurants

	Neighborhood	Average Rating
100	Stuyvesant Town	9.200
97	South Side	9.100
37	Flatiron	9.100
23	Cobble Hill	9.100
78	Midtown South	9.100
19	Chinatown	9.100
66	Little Italy	9.100
83	North Side	9.050
82	Noho	9.050
32	East Village	9.025

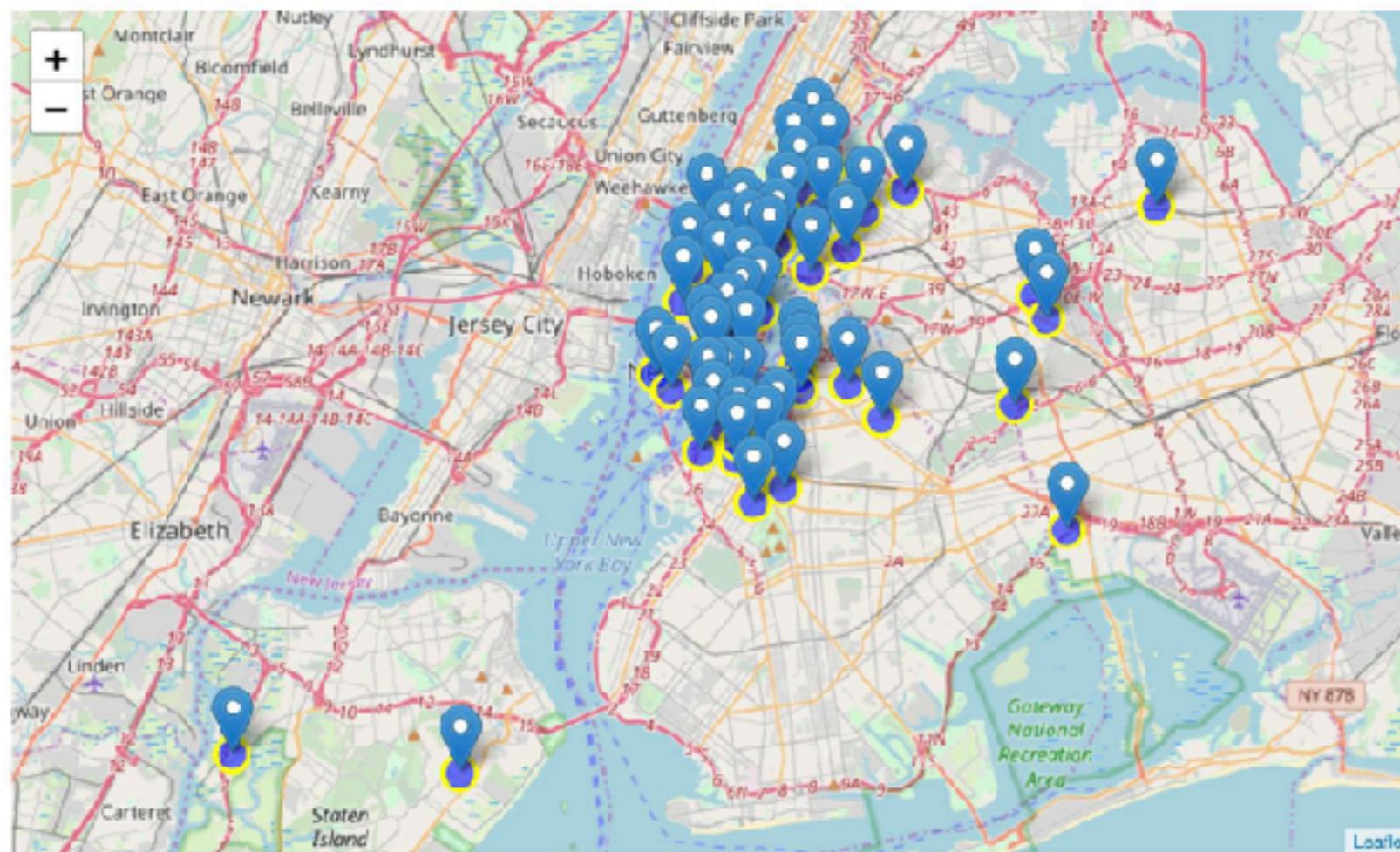
  

Borough	Average Rating	
2	Manhattan	8.689091
1	Brooklyn	7.760294
0	Bronx	7.580000
3	Queens	7.103846
4	Staten Island	5.494444

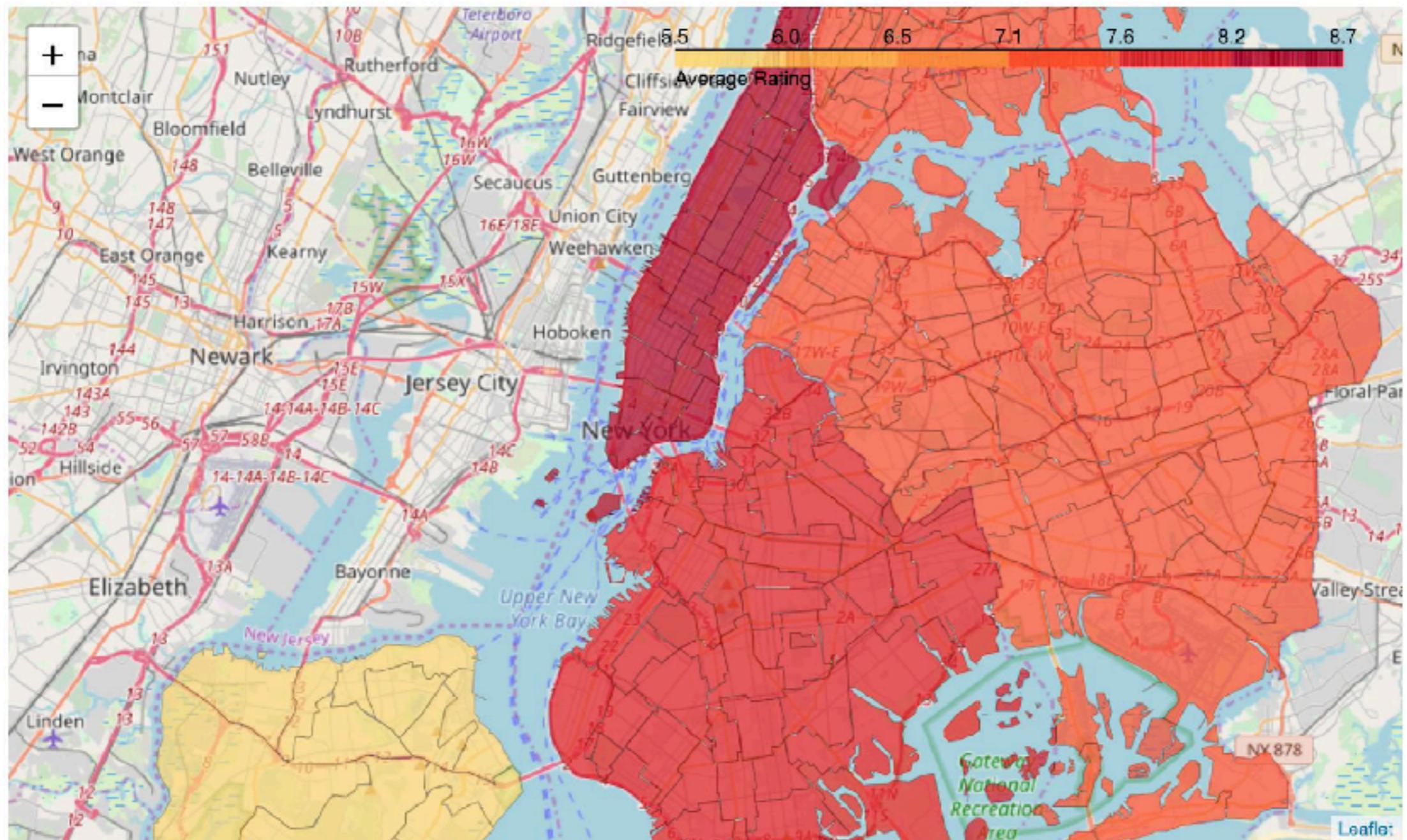


We will visually map the neighborhoods with an average rating greater than or equal to 8 after joining the appropriate dfs to include latitudes and longitudes.

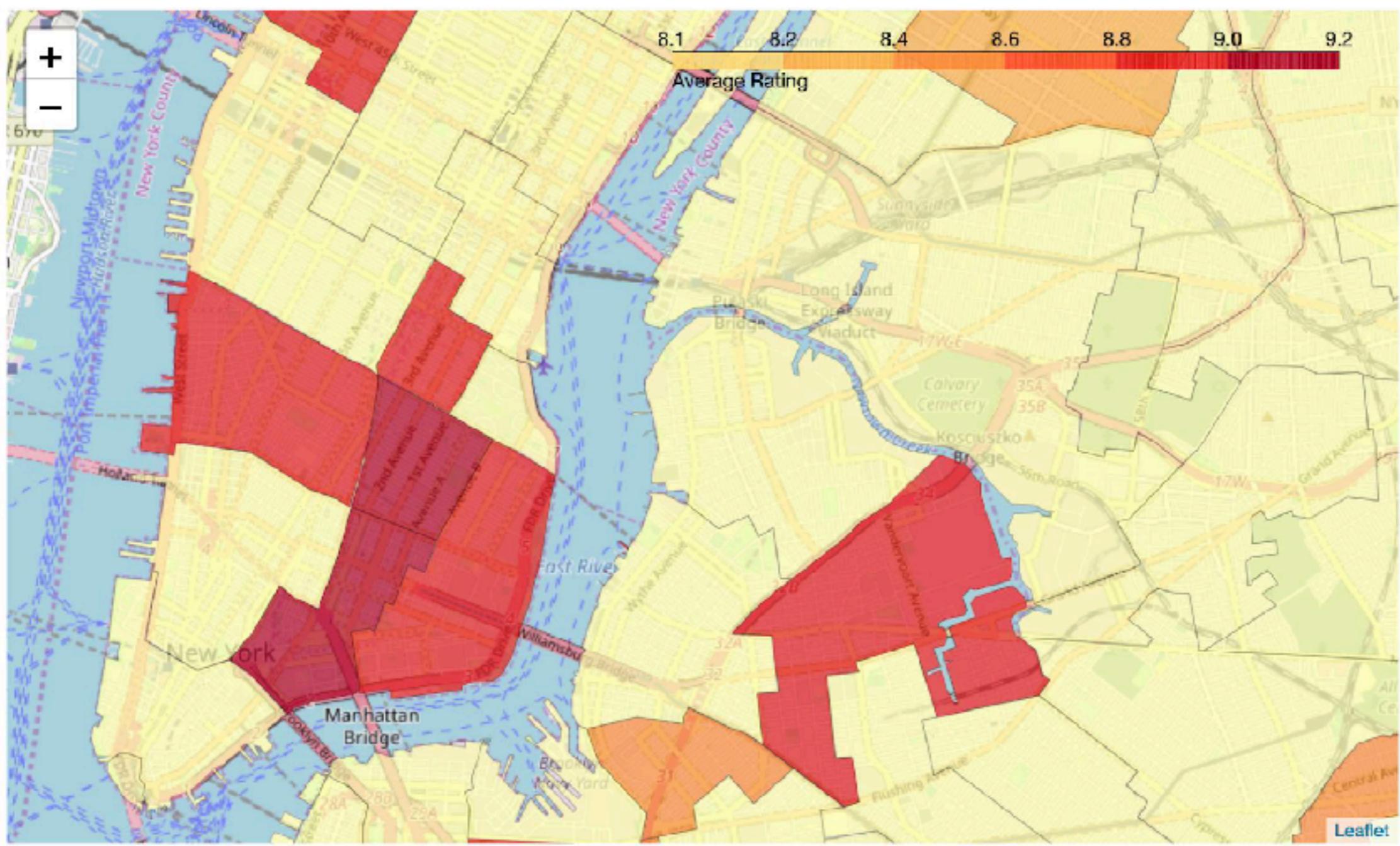
Borough	Neighborhood	Latitude	Longitude	Average Rating	Label	
0	Queens	Astoria	40.768509	-73.915654	8.30	Astoria, Queens(8.3)
1	Manhattan	Battery Park City	40.711932	-74.016869	8.70	Battery Park City, Manhattan(8.7)
2	Brooklyn	Boerum Hill	40.685683	-73.983748	8.75	Boerum Hill, Brooklyn(8.75)
3	Brooklyn	Brooklyn Heights	40.695864	-73.993782	8.70	Brooklyn Heights, Brooklyn(8.7)
4	Brooklyn	Bushwick	40.698116	-73.925258	8.10	Bushwick, Brooklyn(8.1)



Now, we will visualize all NYC boroughs based on average Rating.



Finally, we will visualize NYC Neighborhoods with the best Japanese restaurants based on average Rating.



## Conclusion

1. There are about 203 Japanese restaurants located in all 5 boroughs
2. Brooklyn has the highest number if Japanese restaurants.
3. The neighborhoods of Bath Beach, Murray Hill, and Tudor City have the highest number of Japanese restaurants in all of NYC.
4. The average rating of Japanese restaurant in NYC is 7.6
5. The best Japanese restaurant in NYC according to a rating (9.3) is **Brooklyn Ball Factory** (East Williamsburg, Brooklyn).
6. The best Japanese restaurant in NYC according to likes is **OOTOYA** (Flatiron, Manhattan).
7. The best Japanese restaurant in NYC with maximum tips is **Morimoto** (Chelsea, Manhattan).



## Conclusion

According to choropleth map, there are a lot of neighborhoods where Japanese restaurants have ratings below 8 in NYC. Consequently, there is less competition and a better perspective to open new restaurants. Answering the second question, the best place to open a new Japanese restaurant is any neighborhood in the middle part of Manhattan or **Tribeca and World Trade Center**.

