Table of Contents

- Background and Problem.

- Data Sources.

- Methodology.

- Results.

- Conclusion.

- Discussion.

Intro: Background and Problem

- Background:

    New York City rank number 1 populous city in the United States, most visited tourist city, has many districts and landmarks are well known. It has 5 boroughs: The Bronx, Brooklyn, Manhattan, Queens and Staten Island. New York City has plenty of neighborhoods: 306 neighborhoods. Planning to move to New York City is exciting and challenging at the same time due to its many of neighborhoods.

- Problem:

    This project is to determine which neighborhood has plenty of restaurants nearby.

Data Sources

- New York City boroughs, neighbodhhoods, longtitute and latitude data from https://cocl.us/new_york_dataset.

- Venue, its longitude and its latitude coordinates from Four Square API, focus on restaurants only.

New York City Map with Neighborhoods

# List of Restaurants in New York City's Neighborhood from Four Square

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
3	Wakefield	40.894705	-73.847201	Cooler Runnings Jamaican Restaurant Inc	40.898276	-73.850381	Caribbean Restaurant
13	Co-op City	40.874294	-73.829939	Arby's	40.870411	-73.828606	Fast Food Restaurant
15	Co-op City	40.874294	-73.829939	Townhouse Restaurant	40.876086	-73.828868	Restaurant
26	Eastchester	40.887556	-73.827806	Fish & Ting	40.885539	-73.829151	Caribbean Restaurant
29	Eastchester	40.887556	-73.827806	Dyre Fish Market	40.889318	-73.831453	Seafood Restaurant

Venue Category	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude
Afghan Restaurant	3	3	3	3	3	3
African Restaurant	5	5	5	5	5	5
American Restaurant	169	169	169	169	169	169
Arepa Restaurant	10	10	10	10	10	10
Argentinian Restaurant	9	9	9	9	9	9
Asian Restaurant	51	51	51	51	51	51
Australian Restaurant	4	4	4	4	4	4
Austrian Restaurant	2	2	2	2	2	2
Brazilian Restaurant	7	7	7	7	7	7
Cajun / Creole Restaurant	9	9	9	9	9	9

Top 10 Neighborhood with number of restaurants nearby

	Venue Category
Neighborhood	
Murray Hill	57
Chinatown	44
Greenwich Village	42
Jackson Heights	40
Turtle Bay	39
East Village	38
Clinton Hill	36
Upper West Side	36
Astoria	36
West Village	34

Restaurants Cluster by Neighborhoods
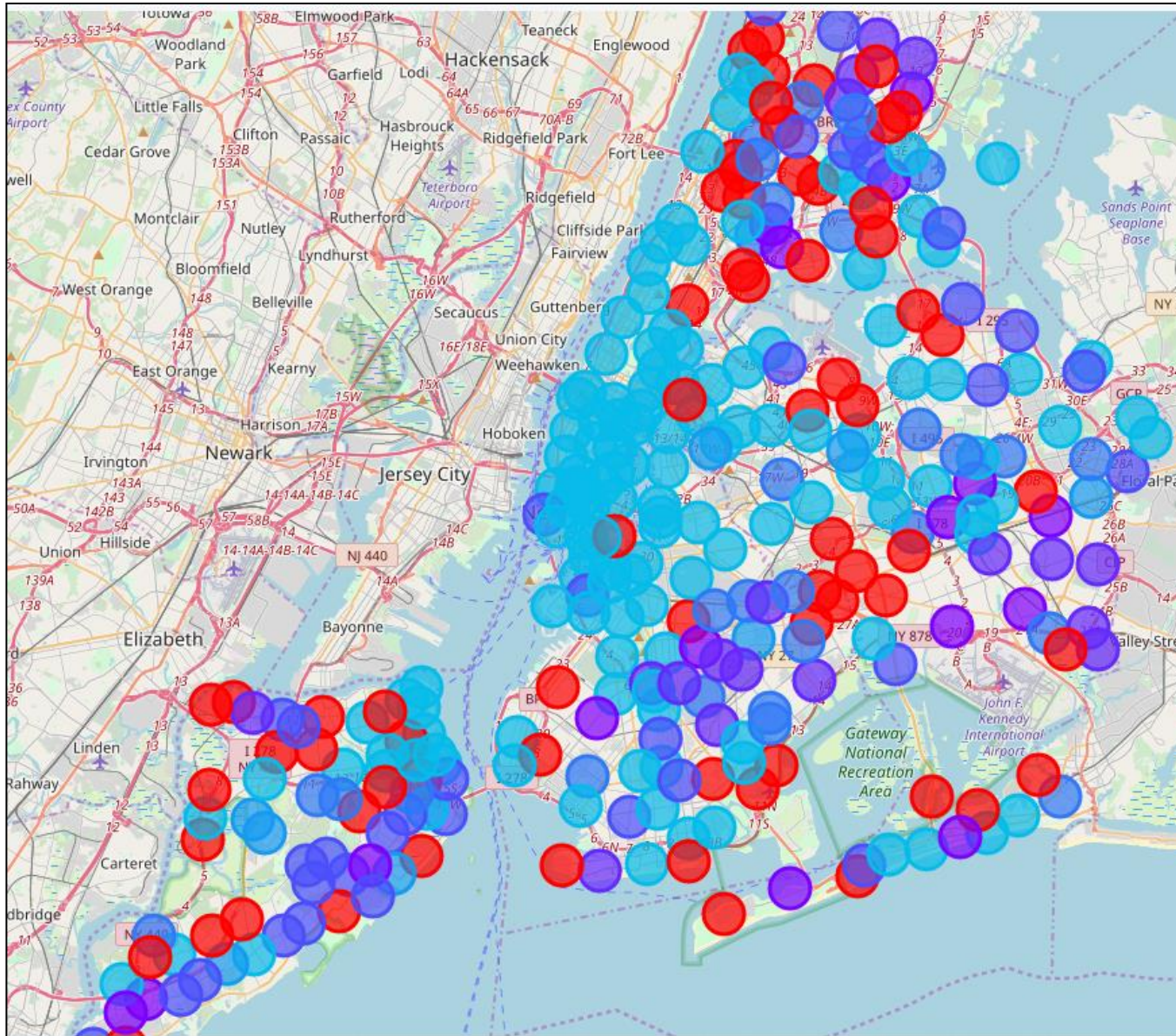
Top 10 Neighborhoods Recommendation

Top 10 Highest Number of Restaurants in NY City
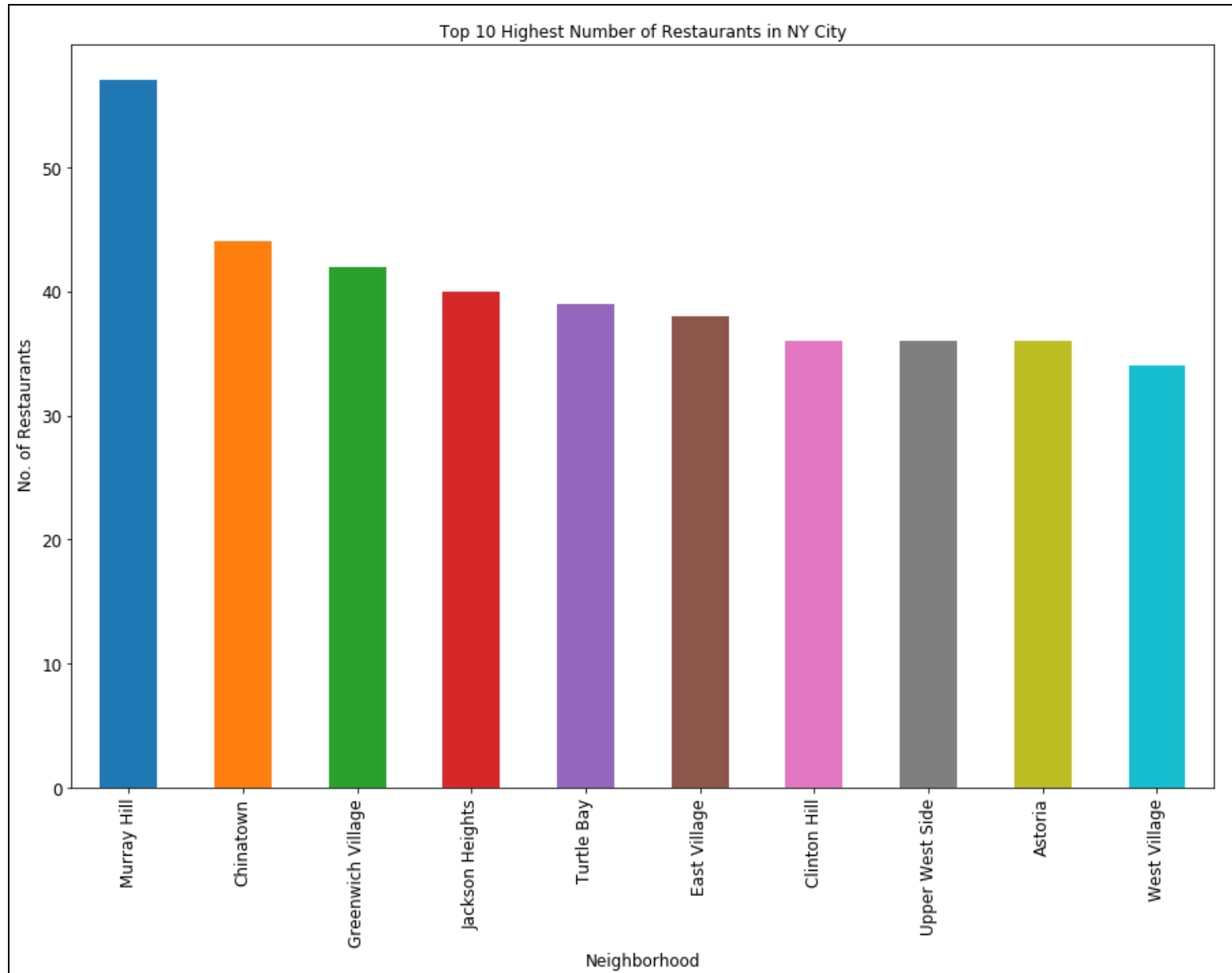
Summary

- Murray Hill neighborhood is number one recommendation for this category. Murray Hill is located in Manhattan borough which also the most dense borough in the New York City. The Empire State, Times Square and Broadway are located in Manhattan borough too.

Link to the codes:

- https://dataplatform.cloud.ibm.com/analytics/notebooks/v2/8e9b13b3-e4e5-466a-a79a-74dc019e71bf/view?access_token=5889a797098bcfd06325139e997efa6f3db00dd4c2fa1fe840658cddd8a5e07f