Explore Zomato restaurants dataset in the city of New Delhi

(Business Problem)Introduction

New Delhi is the capital city of India. It is a part of the city of Delhi's 11 districts. The city itself has a population of 257,803. However, the much larger metro area has a population that exceeds 26 million.

With its diverse culture , comes diverse food items. There are many restaurants in New Delhi City, each belonging to different categories like Chinese , Italian , French etc.

So as part of this project , we will list and visualize all major parts of New Delhi City .

Objectives

Questions that can be asked using the above mentioned datasets

- What is best location in New Delhi City for Chinese Cuisine ?

- Which areas have large number of Chinese Restaurant Market ?

- Which all areas have less number of restaurant ?

- Which is the best place to stay if I prefer Chinese Cuisine ?

- What places are have best restaurant in New Delhi?

Data

For this project we need the following data :

- New Delhi Restaurants data that contains list Locality, Restaurant name,Rating along with their latitude and longitude.
- Data source : Zomato kaggel dataset
- Description : This data set contains the required information. And we will use this data set to explore various locality of new delhi city.
- Nearby places in each locality of new delhi city.
- Data source : Fousquare API
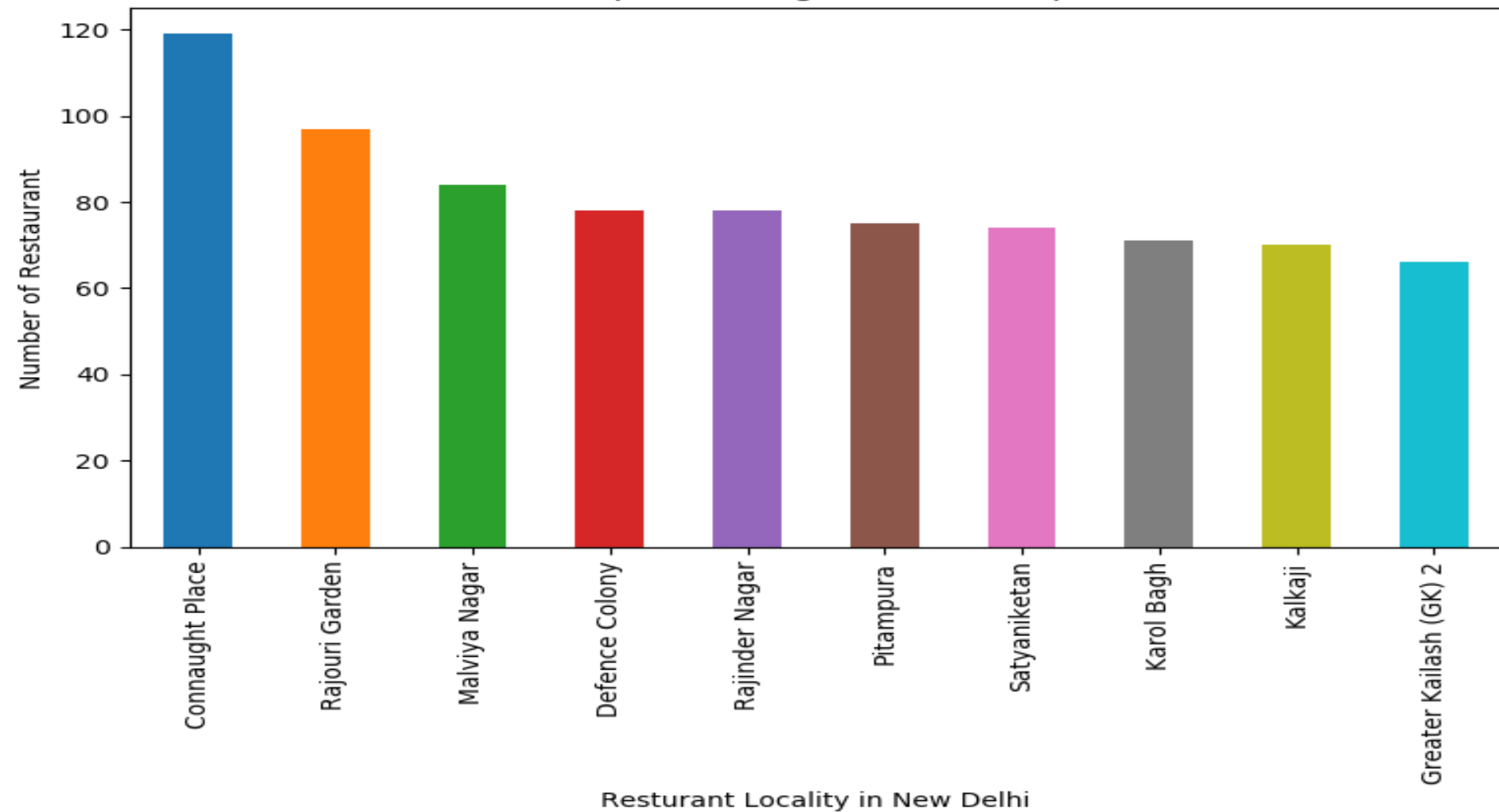- Description : By using this api we will get all the venues in each neighborhood.

Approach

- Collect the new delhi city data from Zomato kaggel dataset

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

- Filter out all venues that are nearby by locality.

- Using aggregative rating for each resturant to find the best places.

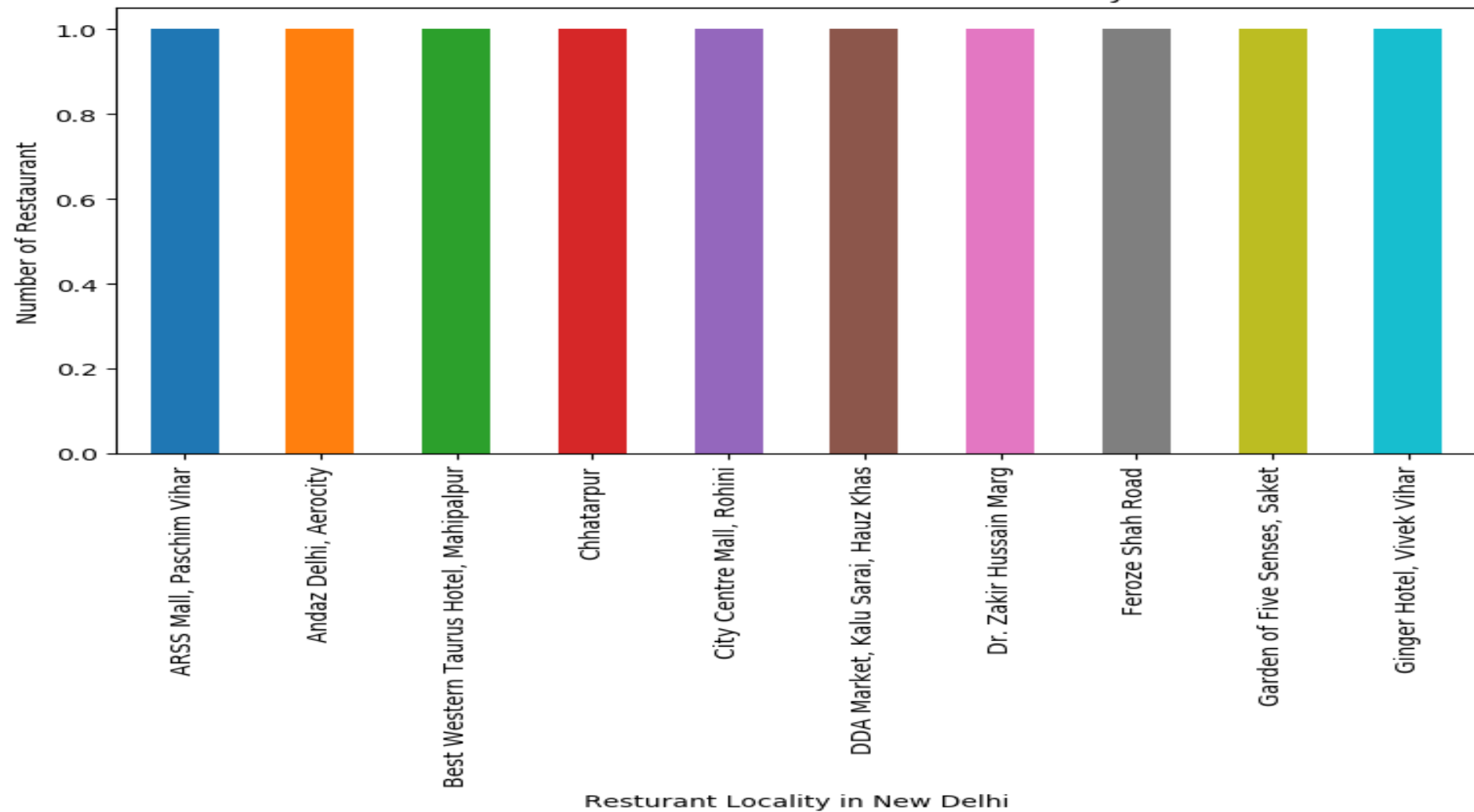- Visualize the Ranking of neighborhoods using folium library(python)

Results

The highest rated resturant in top 10 locality of New Delhi

Resturant Locality in New Delhi
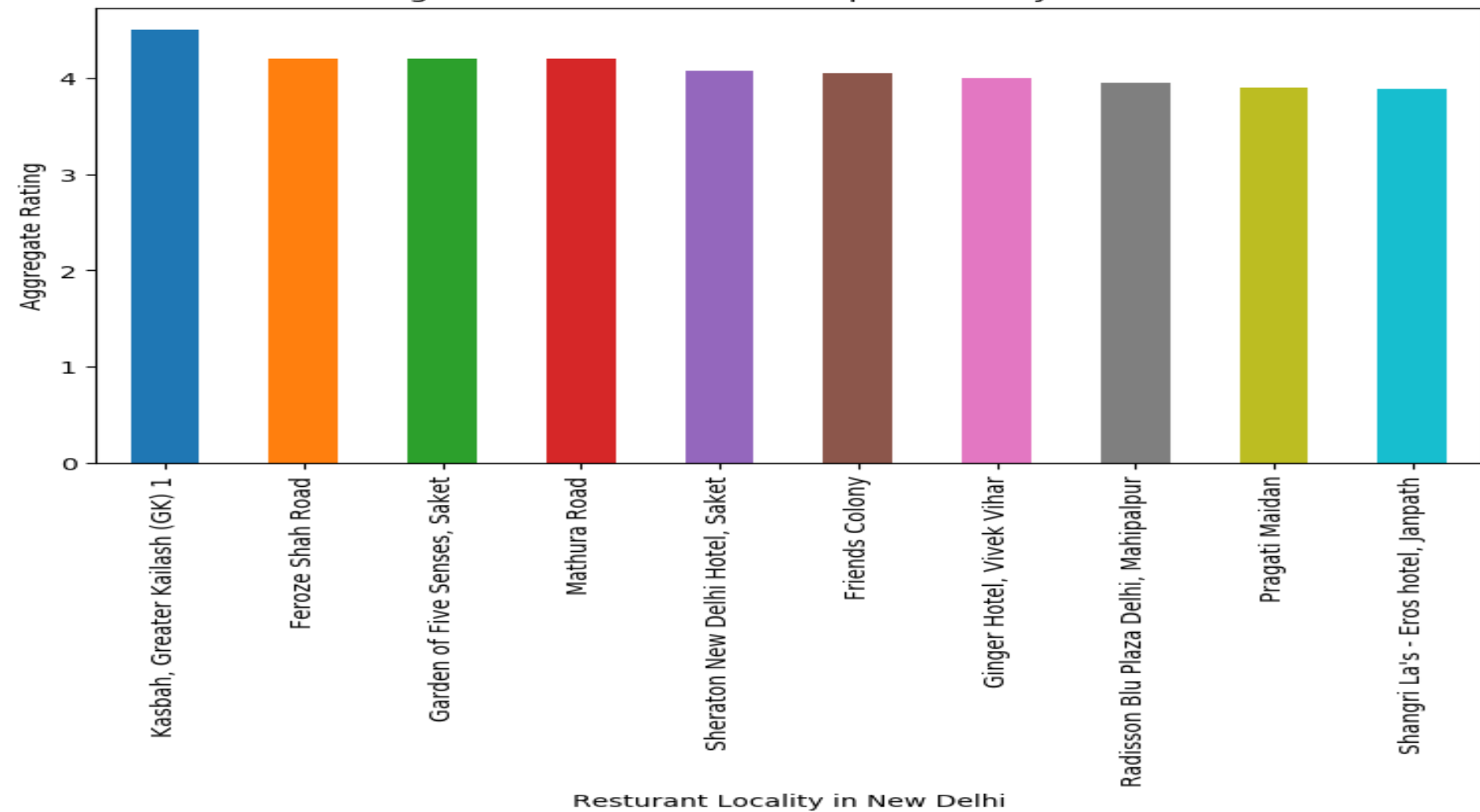
Suitable places are good for edible person

The lowest number of Restaurant available in Locality of New Delhi

Number of Restaurant (y-axis)

Resturant Locality in New Delhi (x-axis)

x-axis labels: ARSS Mall, Paschim Vihar; Andaz Delhi, Aerocity; Best Western Taurus Hotel, Mahipalpur; Chhatarpur; City Centre Mall, Rohini; DDA Market, Kalu Sarai, Hauz Khas; Dr. Zakir Hussain Marg; Feroze Shah Road; Garden of Five Senses, Saket; Ginger Hotel, Vivek Vihar

The best Locality for chinese restaurant in New Delhi city
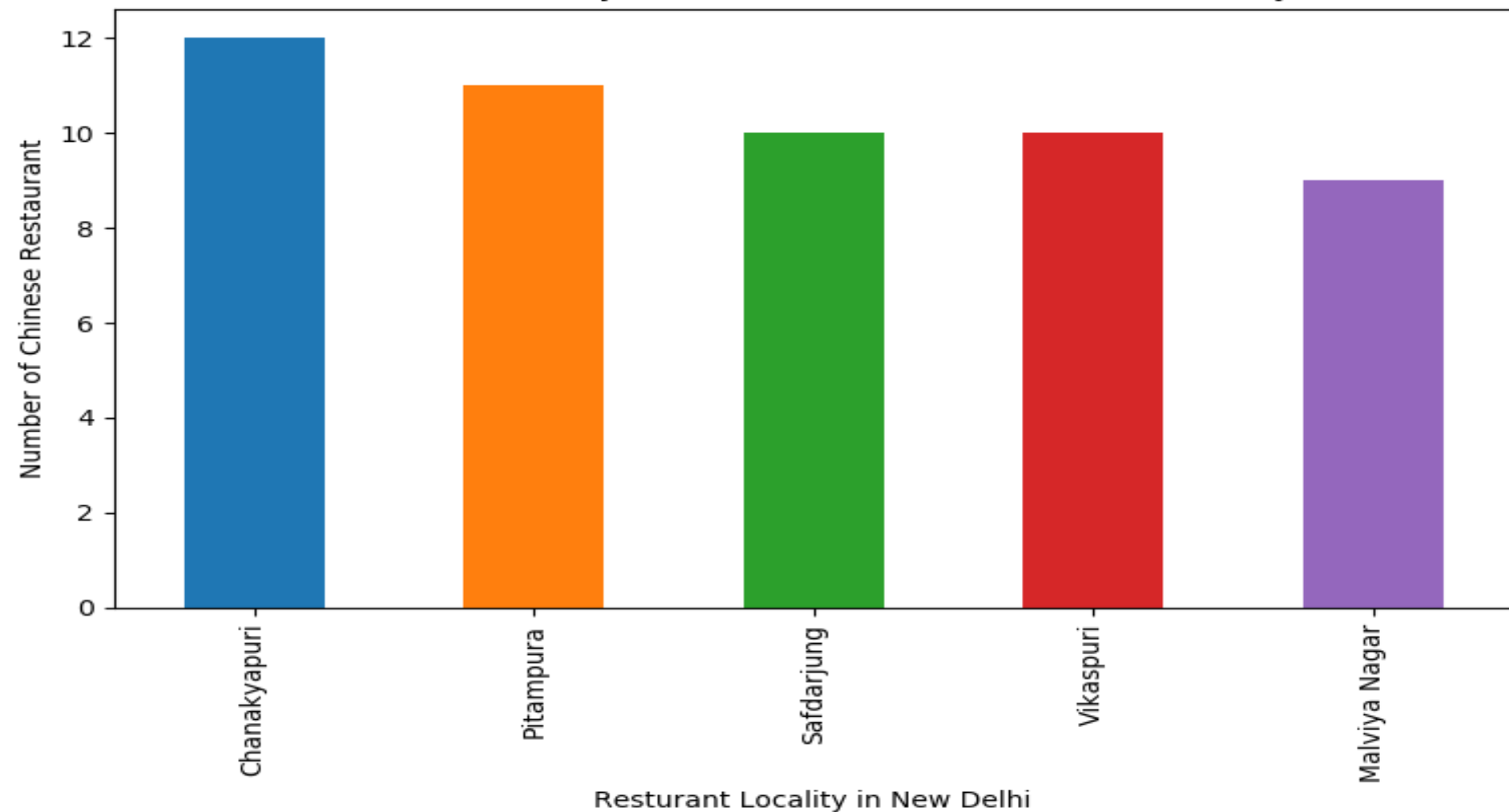
The best places for Chinese restaurant in New Delhi city
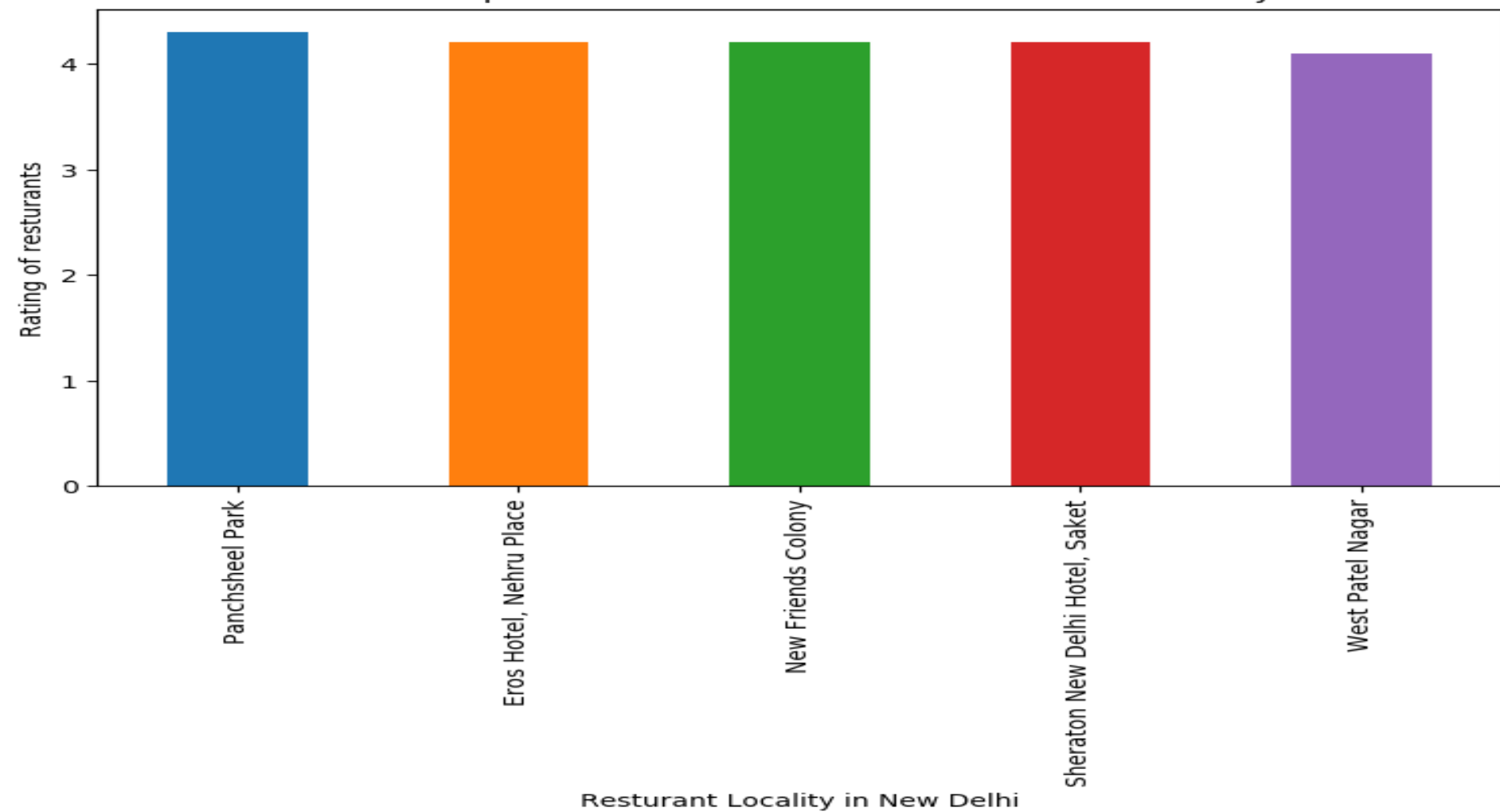
Non suitable places for edible person

Number of Restaurant (y-axis)

Resturant Locality in New Delhi (x-axis)

Categories: ARSS Mall, Paschim Vihar; Andaz Delhi, Aerocity; Best Western Taurus Hotel, Mahipalpur; Chhatarpur; City Centre Mall, Rohini; DDA Market, Kalu Sarai, Hauz Khas; Dr. Zakir Hussain Marg; Feroze Shah Road; Garden of Five Senses, Saket; Ginger Hotel, Vivek Vihar
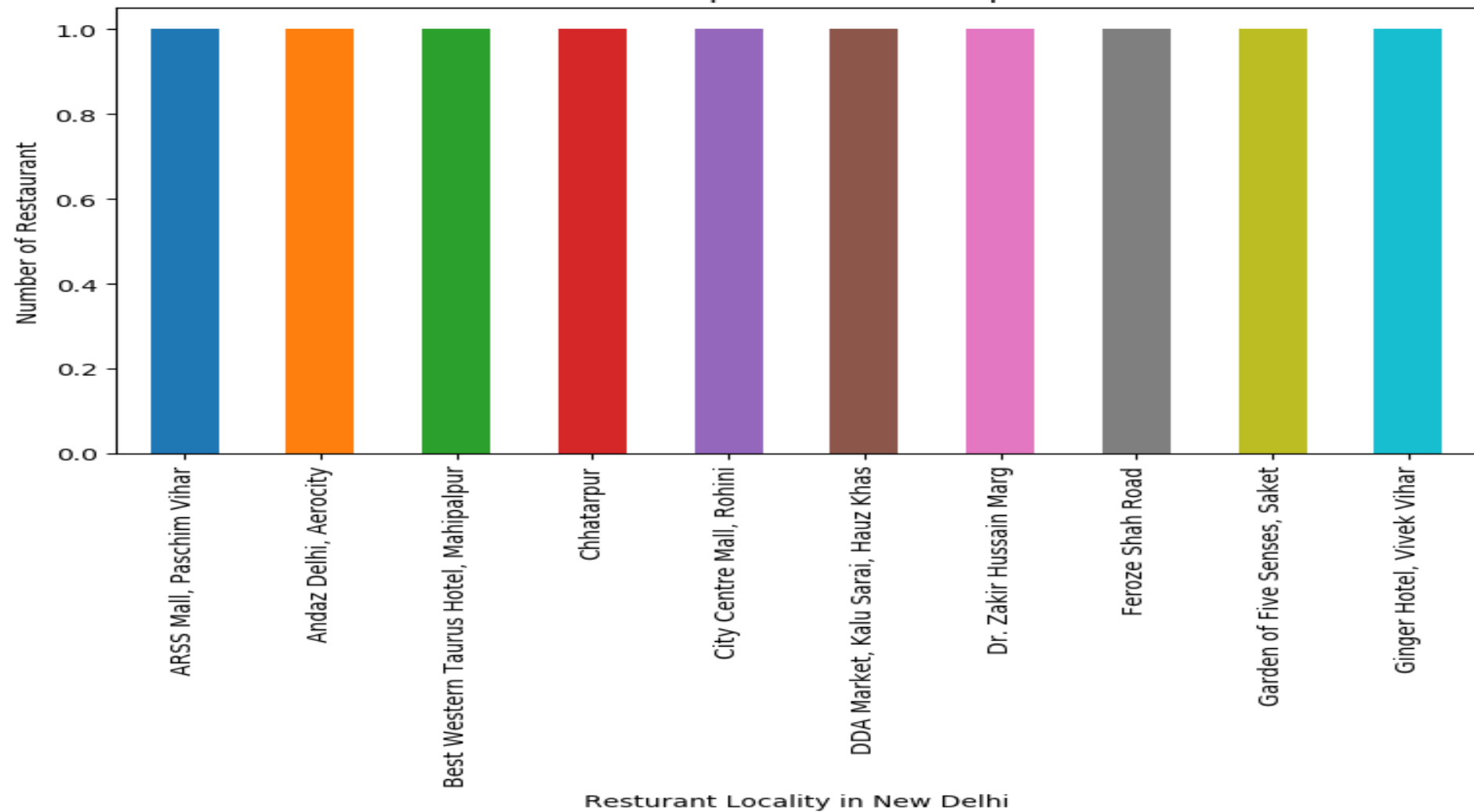
Cluster 1:

The Indian restaurants are most recommended venues nearby the locations.

	Lat	Agg_Rating	Comments	No_of_Votes	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue
0	28.668945	3.100000	Average	117	0	Indian Restaurant	Sandwich Place	Market	Multicuisine Indian Restaurant	Pizza Place	Coffee Shop	Chinese Restaurant
4	28.690020	3.033333	Average	126	0	Indian Restaurant	Department Store	Food	Pizza Place	African Restaurant	Airport	Frozen Yogurt Shop
12	28.641698	3.050000	Average	17	0	Indian Restaurant	Hotel	Movie Theater	Asian Restaurant	Hostel	Theme Park	Diner
		Average				Indian	Dessert	Smoke		Snack		Dim Sum

Cluster 2:

It is recommended for the Hotel and Nightclubs venues areas:

	Lat	Agg_Rating	Comments	No_of_Votes	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	
3	28.553077	3.200000	Average	59	1	Hotel	Rental Car Location	Airport Lounge	Airport Terminal	Coffee Shop	Fast Food Restaurant	Falafel Restaurant	Re
10	28.554807	3.000000	Average	4	1	Hotel	Spa	Food Court	Restaurant	Lounge	Bed & Breakfast	Punjabi Restaurant	
19	28.548827	2.700000	Average	9	1	Hotel	Buffet	Hotel Bar	Bed & Breakfast	Italian Restaurant	Shoe Store	Indian Restaurant	Acc
25	28.495624	2.700000	Average	23	1	Luggage Store	Indian Restaurant	Hotel	Japanese Restaurant	Donut Shop	Yoga Studio	French Restaurant	Fo

Cluster 3:

It seems like pizza place,

	Lat	Agg_Rating	Comments	No_of_Votes	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue
2	28.656131	3.275000	Average, Good	434	2	Pizza Place	Indian Restaurant	Shopping Mall	Multiplex	Café	Hotel	Food Court	Food & Drink Shop
22	28.654105	3.085714	Average	80	2	Pizza Place	Falafel Restaurant	Fried Chicken Joint	French Restaurant	Food Truck	Food Court	Food & Drink Shop	Food
33	28.657388	3.320000	Average, Good	636	2	Pizza Place	Hotel	Multiplex	Indian Restaurant	Dessert Shop	Design Studio	French Restaurant	Food Truck
50	28.645084	3.235000	Average, Good, Poor, Very Good	2578	2	Pizza Place	Coffee Shop	Bar	Metro Station	Fast Food Restaurant	Café	Chinese Restaurant	Liquor Store
57	28.699837	3.376471	Average, Good, Very Good	2460	2	Pizza Place	Food Truck	Falafel Restaurant	Fried Chicken Joint	French Restaurant	Food Court	Food & Drink Shop	Food

Cluster 4:

It's most recommended for cafes

	Lat	Agg_Rating	Comments	No_of_Votes	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Com V
1	28.537063	3.292308	Average, Good, Poor, Very Good	1560	3	Café	Pub	Indian Restaurant	French Restaurant	Food Truck	Food Court	Food & Drink Shop	
8	28.555599	3.800000	Average, Very Good	2411	3	Café	Stadium	Other Great Outdoors	Golf Course	Metro Station	Coffee Shop	Hotel	De
9	28.659870	3.281481	Average, Good	1309	3	Café	Burger Joint	Burrito Place	Yoga Studio	French Restaurant	Food Truck	Food Court	Fo

Cluster 5:

Fast food, cafes are the most recommended venues

	Lat	Agg_Rating	Comments	No_of_Votes	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue
5	28.700516	3.040000	Average, Good, Poor	594	4	Fast Food Restaurant	Pizza Place	Multiplex	Bus Station	Sandwich Place	Gym / Fitness Center
6	28.527088	3.117391	Average, Good, Poor	1012	4	Chinese Restaurant	Hotel	Food & Drink Shop	Coffee Shop	Bar	Market
7	28.541298	3.425000	Average, Good, Very Good	2460	4	Coffee Shop	Shopping Mall	Clothing Store	Fast Food Restaurant	Italian Restaurant	Asian Restaurant

Conclusion

- **Chanakyapuri, Pitampura, Safdarjung** are some of the best neighborhoods for Chinese cuisine.

- **Panchsheel park**, **Nehru place** have the best Chinese Restaurant.

- **Connaught place**, **Rajouri garden**, **Malviya nagar** are the best places for edible person.

- **Greater kailash**, **Feroze shah road**, **Saket** have best rated restaurants in New Delhi.