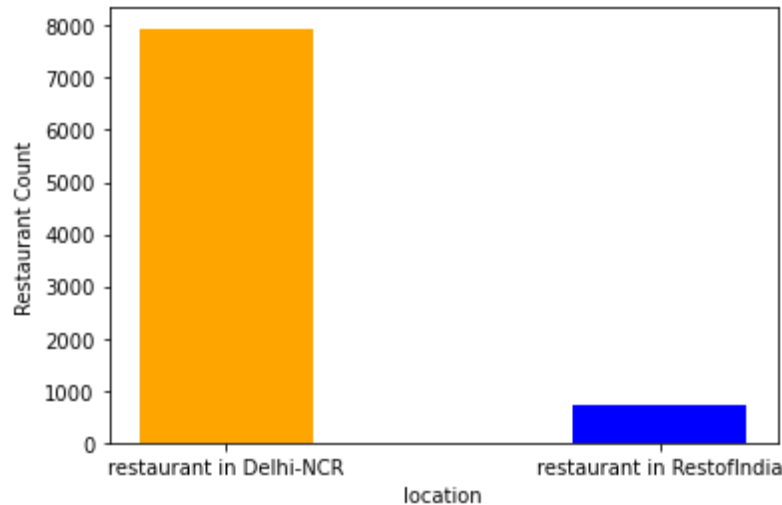# Zomato API Project

Question 1

> **Bar graph of number of restaurants present in Delhi NCR vs Rest of India**

The above graph clearly shows that the restaurants present in the database are largely skewed towards Delhi NCR region as the numbers of restaurants in rest of India are very less in numbers when compared to Delhi NCR.

> ## Cuisines in Rest of India which are not common in Delhi-NCR

1. Malwani
2. German
3. Cajun
4. BBQ

Explanation
Above 4 cuisines are present in in rest of India while they are not present anywhere in Delhi-NCR

➤ **Cuisines in Rest of India which are not common in Delhi-NCR (through API)**

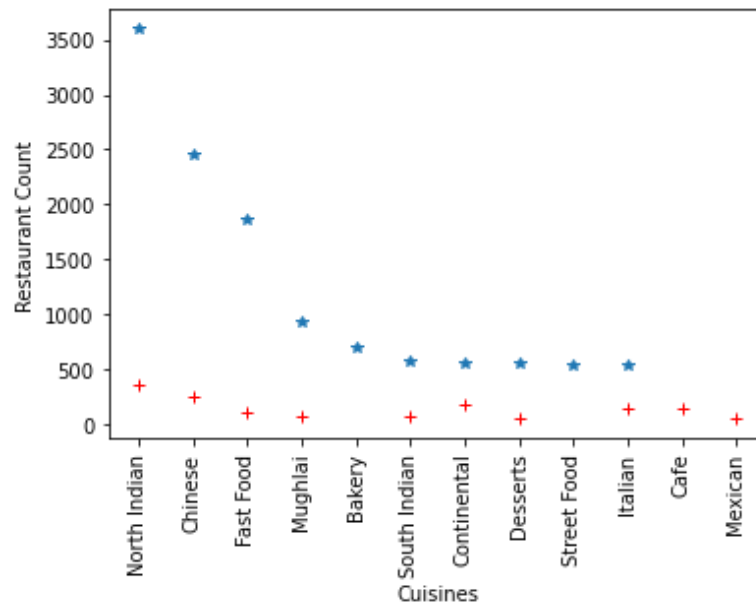'Armenian', 'German', 'Cajun', 'Charcoal Grill', 'Indian'

Explanation
This proves that our dataset has some wrong or missing values since the output is not matching with the output when solved using dataset provided

➤ **Top 10 cuisines in Delhi-NCR & Rest of India**

Cuisines in Delhi-NCR	Cuisines in Rest of India
North Indian	**North Indian**
Chinese	Chinese
Fast Food	Continental
Mughlai	Italian
Bakery	Cafe
South Indian	Fast Food
Continental	South Indian
Desserts	Mughlai
Street Food	Dessert
Italian	Mexican

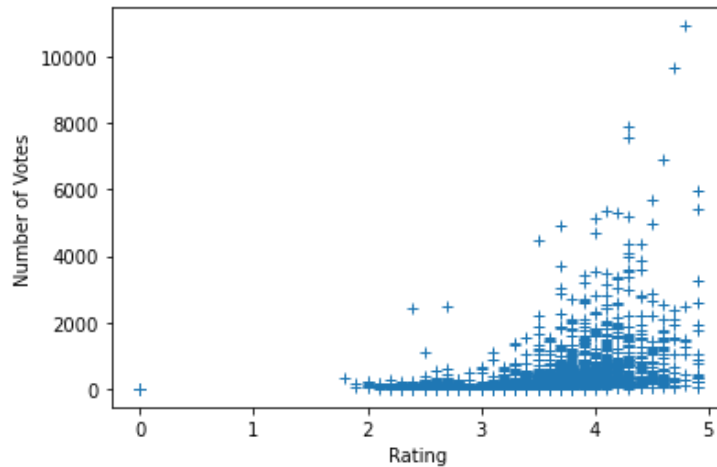➢ **Plot graph to show how cuisine served is different from Delhi NCR to Rest of India**

Explanation

- The above table shows the difference in eating habits of people living in Delhi-NCR and in Rest of India.
- One of the most interesting differences is Mughlai food being featured at 4th position in Delhi-NCR while at 8th in Rest of India .This is due to the influence of Mughal Empire which ruled Delhi and neighboring areas .
- North Indian and Chinese food are favorites and enjoyed in both the areas.
- Italian food (pizzas and pasta) are much popular in rest of India when compared to Delhi-NCR
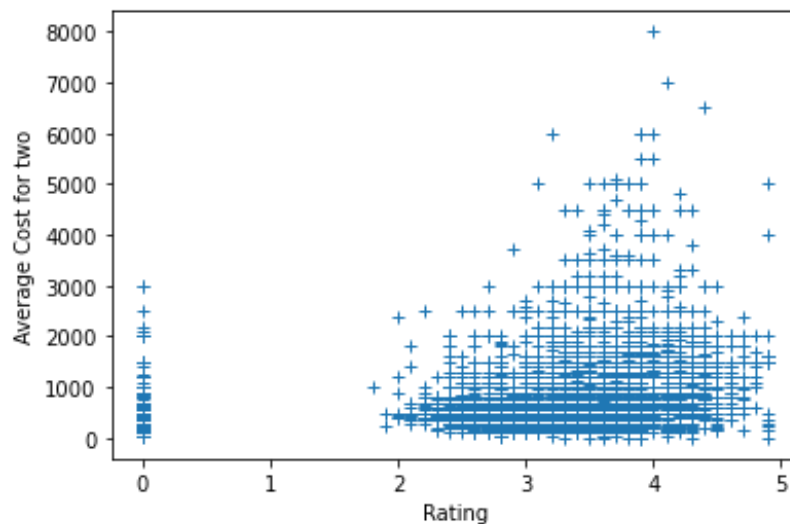
Question 2

➢ **Rating vs Votes**

Explanation
- o The above graph shows relation between Rating and Number of Votes
- o We can observe that most of restaurants are rated between 3 and 4.5
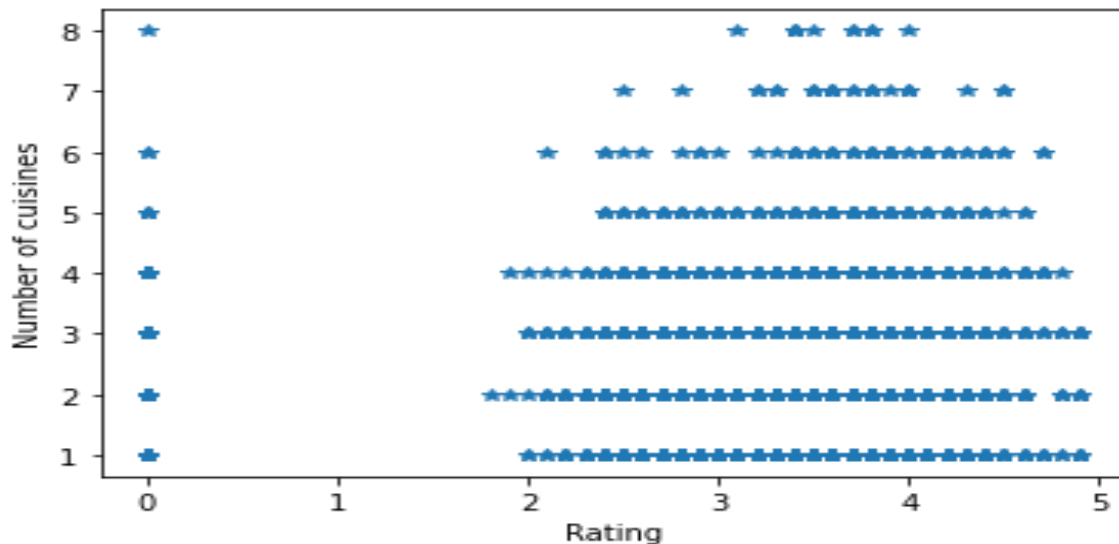- o There is a trend which shows that better rated restaurants have got more number of votes

➢ **Rating vs Average Cost for two**

Explanation

- o The above graph represents a relation between average cost for two and rating
- o Nearly 70 -80 percentage of restaurants are pocket friendly restaurants in India as the average cost for them is under 1000 rupees
- o Most of the restaurants with a high cost are rated above 3 stars

> **Rating vs Number of Cuisines**

Explanation

- o The above graph represents a relation between number of cuisines and rating
- o Majority of restaurants are rated above 3 stars and restuarnts serving collection of different cuisines are rated well
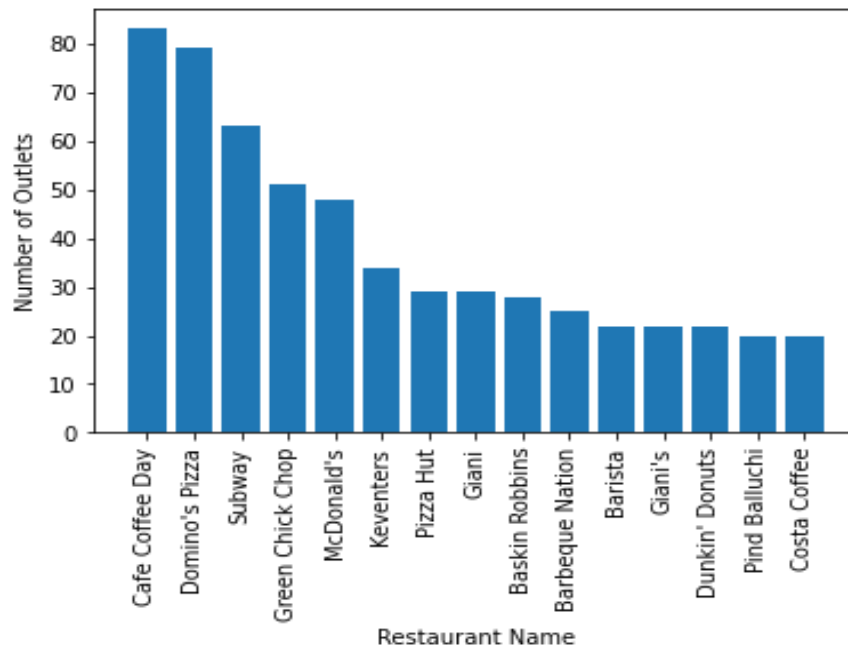
> **Weighted restaurant rating of each locality and find out the top 10 localities with more weighted restaurant rating**
>   1. Aminabad   4.9
>   2. Hotel Clarks Amer, Malviya Nagar   4.9
>   3. Friends Colony   4.886916367367881
>   4. Powai   4.841868613138686
>   5. Kirlampudi Layout   4.820161290322581
>   6. Express Avenue Mall, Royapettah   4.8
>   7. Deccan Gymkhana   4.8
>   8. Banjara Hills   4.7187617260787995
>   9. Sector 5, Salt Lake   4.707022552098202
>   10. Riverside Mall, Gomti Nagar   4.7

Above is a list of top 10 localities in India with maximum rated restaurants starting from Aminabad (Lucknow) with rating 4.9 .These localities have some of the best rated restaurants with really good food.
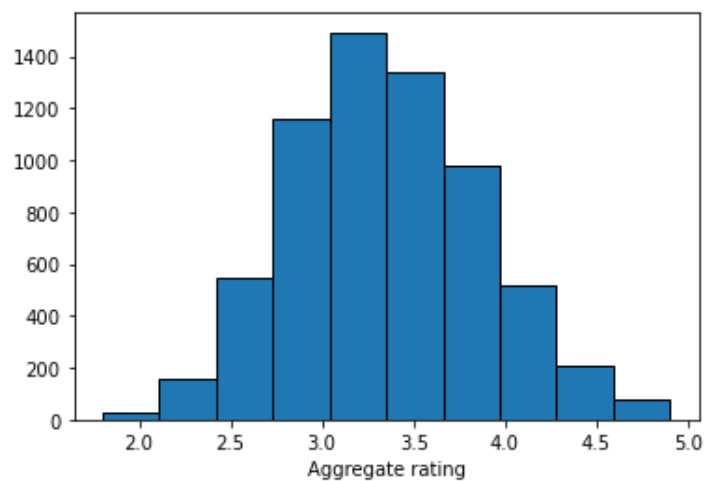
Question 3

> ## Top 15 restaurants with maximum outlets

Explanation

o The above graph represents top 15 restaurants with maximum number of outlets

o CCD ,Dominos ,Subway are some of the restaurants with more outlets since they are very much famous with the crowd in India
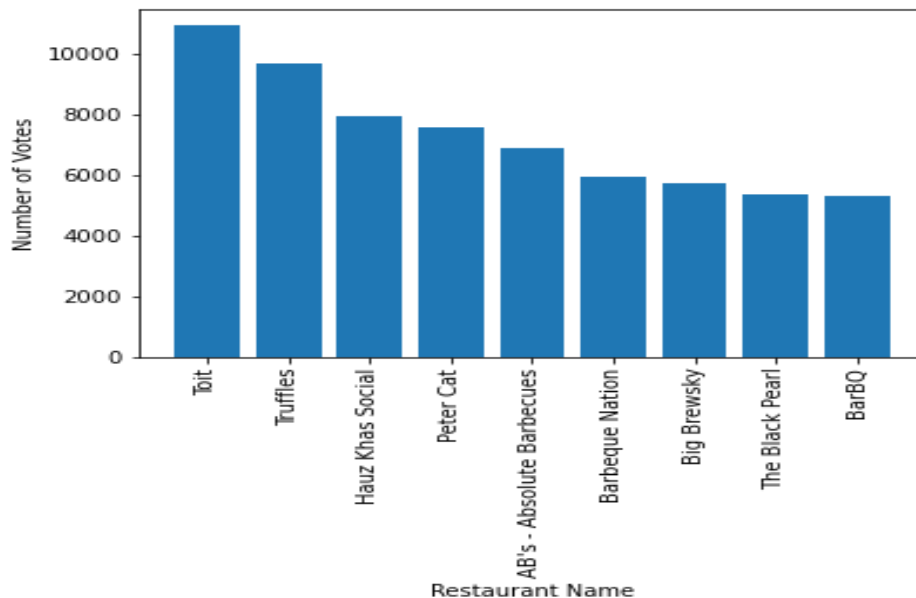
> ## Histogram to show Aggregate rating
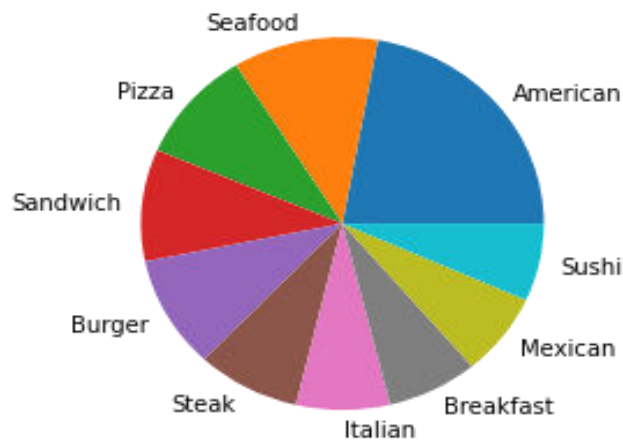
Explanation

- o Above histogram shows the aggregate rating of restaurants
- o More number of restaurants are rated in range of 3-4 stars while restaurants with very less or very high rating are less in number
- o This also shows that bulk of Indian restaurants receive an average rating from their customers

➢ **Top 10 restaurants in the data with the highest number of votes**
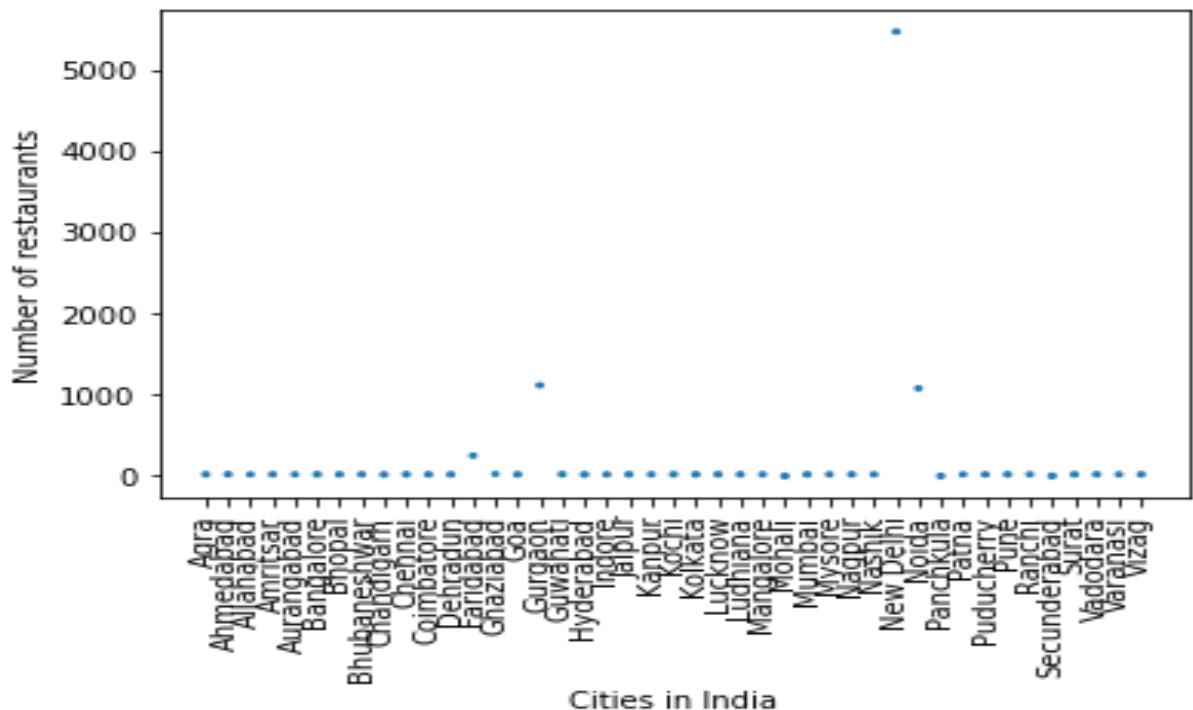

- o The above bar graph shows list of top 10 restaurants with maximum number of outlets
- o Famous names like Truffles, Hauz Khas social and BarbequeNation are present in the list
- o This clearly shows that more number of people visit these restaurants as they have more number of votes received

➢ **Top 10 cuisines present in restaurants in the USA**

o Above pie chart shows eating habits of United States
o The most famous cuisine is American itself without any doubt but foods like Seafood, Pizza, Sandwich, Burger are very much famous foods in the US
o It also shows that people in US loves fast food and rely on Pizza and Burgers a lot

➢ **Bubble graph of a number of Restaurants present in the city of India and keeping the weighted restaurant rating of the city in a bubble**

o Above graph shows the number of restaurants in different cities of India.
o There are in total 43 cities mentioned in the graph
o The above graph clearly shows that the given dataset is incomplete as not all of the cities are mentioned
o Numbers of restaurant in cities excluding Delhi-NCR are very less in number since they are not correctly mentioned in the database while New Delhi has most number of restaurants with the count going more than 5000
o Count of restaurants in big cities like Mumbai and Hyderabad are completely incorrect.

NOTE:
Complete Code along with graphs and required outputs are mentioned in separate python file

Submitted by:
Sparsh Lamba
(Data Science &
Machine Learning Course)