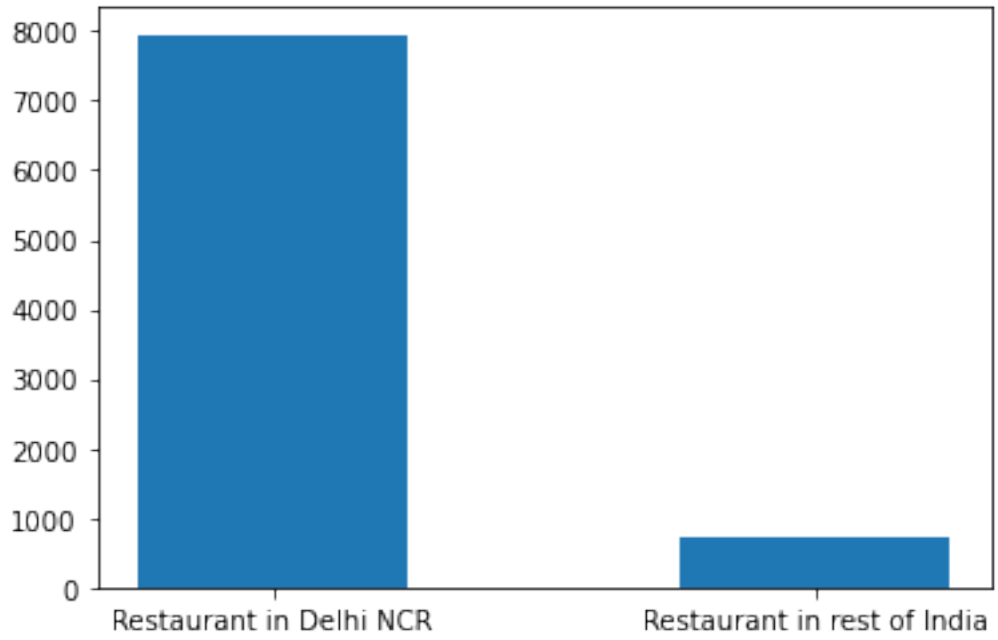
Zomato API Project

1. **The dataset is highly skewed toward the cities included in Delhi-NCR. So, we will summaries all the other cities in Rest of India while those in New Delhi, Ghaziabad, Noida, Gurgaon, Faridabad to Delhi-NCR. Doing this would make our analysis turn toward Delhi-NCR v Rest of India.**

    1. Plot the bar graph of number of restaurants present in Delhi NCR vs Rest of India.

        Solution:- As we know Delhi-NCR is a major city in India and Zomato.csv is highly concentrated on Delhi-NCR. Count of restaurants in Delhi-NCR is about 7500 while count in Rest of India is about 800 As we can see this is huge difference and this can be seen by graph shown below



2. Find the cuisines which are not present in restaurant of Delhi NCR but present in rest of India. Check using Zomato API whether these cuisines are not served in restaurants of Delhi-NCR or just it due to incomplete dataset.

Solution: - Delhi-NCR is huge city and it contains hundreds of cuisines which are even not present across India. But there are some cuisines which are not in Delhi-NCR but present in rest of India. For example
Cajun
German
Malwani
BBQ

These are according to Zomato.csv but according to Zomato API
zomato-api | 1.0.0 | Vivek-Raj | SwaggerHub
Only German, Cajun are not present in Delhi it means Zomato.csv contain incomplete Data Set

3. Find the top 10 cuisines served by maximum number of restaurants in Delhi NCR and rest of India.

Solution :- In India there is lot of food variety due to people of different region, religion and food taste but there are few that are common all across India. Those are

10 famous Cuisines in Delhi NCR

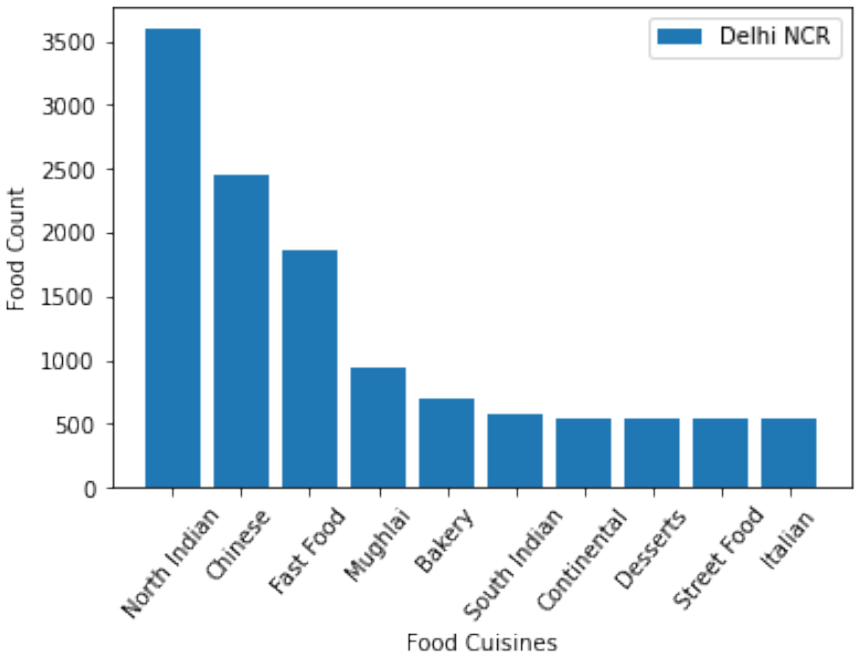
North Indian: - 3597 Restaurants serves North Indian cuisines in Delhi-NCR
Chinese: - 2448 Restaurants serves Chinese cuisines in Delhi-NCR
Fast Food: - 1866 Restaurants serves Fast Food cuisines in Delhi-NCR
Mughlai: -933 Restaurants serves Mughlai cuisines in Delhi-NCR
Bakery: - 697 Restaurants serves Bakery cuisines in Delhi-NCR
South Indian: -569 Restaurants serves South Indian cuisines in Delhi-NCR
Continental: - 547 Restaurants serves Continental cuisines in Delhi-NCR
Desserts: - 542 Restaurants serves Desserts cuisines in Delhi-NCR
Street Food: -538 Restaurants serves Street Food cuisines in Delhi-NCR
Italian: -535 Restaurants serves Italian cuisines in Delhi-NCR

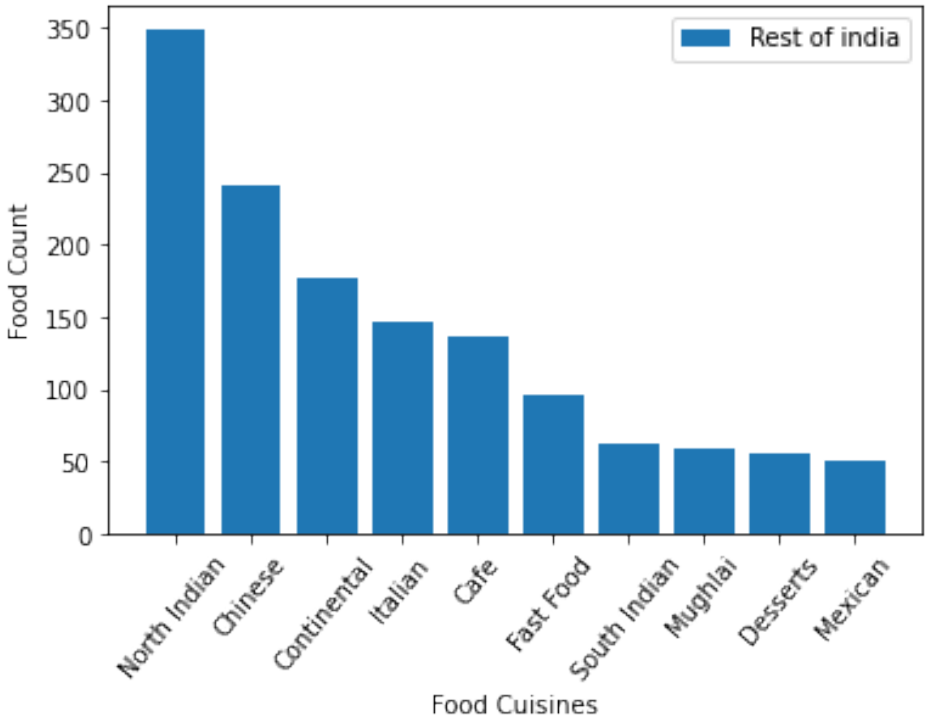
10 famous Cuisines in Rest of India

North Indian: -349 Restaurants serves North Indian cuisines in rest of India
Chinese: -242 Restaurants serves Chinese cuisines in rest of India
Continental: -177 Restaurants serves Continental cuisines in rest of India
Italian: -147 Restaurants serves Italian cuisines in rest of India
Café: -136 Restaurants serves Café cuisines in rest of India
Fast Food: -97 Restaurants serves Fast Food cuisines in rest of India
South Indian: -62 Restaurants serves South Indian cuisines in rest of India
Mughlai: -59 Restaurants serves Mughlai cuisines in rest of India
Desserts: -55 Restaurants serves Desserts cuisines in rest of India
Mexican: -50 Restaurants serves Mexican cuisines in rest of India

4. Write a short-detailed analysis of how cuisine served is different from Delhi NCR to Rest of India. Plot the suitable graph to explain your inference.

Solution: - In India there is lot of food variety due to people of different region, religion and food taste but there are few that are common all across India Like people from south prefer south Indian or sea food while north Indians prefer Chicken or north Indians due to which major variety is been seen


Delhi NCR
Food Count
0
500
1000
1500
2000
2500
3000
3500
North Indian
Chinese
Fast Food
Mughlai
Bakery
South Indian
Continental
Desserts
Street Food
Italian
Food Cuisines

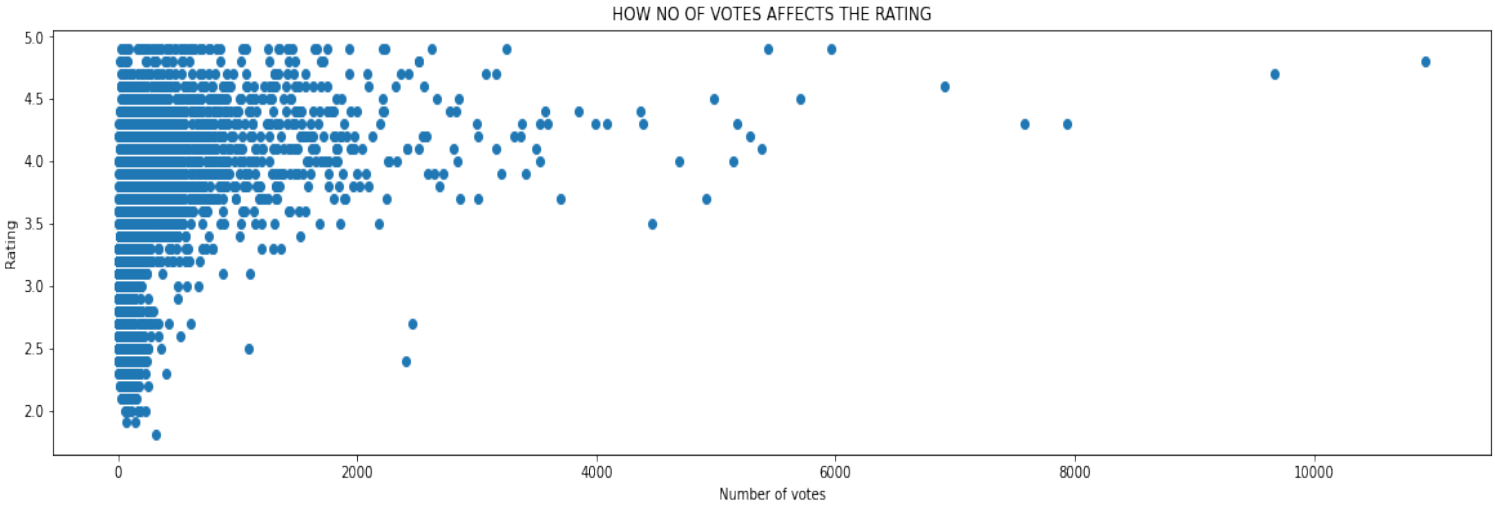

Rest of india
Food Count
0
50
100
150
200
250
300
350
North Indian
Chinese
Continental
Italian
Cafe
Fast Food
South Indian
Mughlai
Desserts
Mexican
Food Cuisines

2. User Rating of a restaurant plays a crucial role in selecting a restaurant or ordering the food from the restaurant.

1. Write a short detail analysis of how the rating is affected by restaurant due following features: Plot a suitable graph to explain your inference.

    1. Number of Votes given Restaurant

    Solution: In India various Restaurants are there and rating effects most of the restaurants as shown in figure more than 10000 people voted the restaurants. During the last few years, reviews have become crucial to the success of a restaurant, as every restaurant owner is aware of the fact that good reviews can boost popularity and profitability, whereas terrible reviews even have the potential of closing businesses down. That's why it is crucial for restauranteurs to understand the impact of reviews. A person judge restaurant just by checking its reviews. A 5 star restaurants has higher chance to get selected while 1 or 2 star restaurants are ignored ignoring the fact how good they are actually



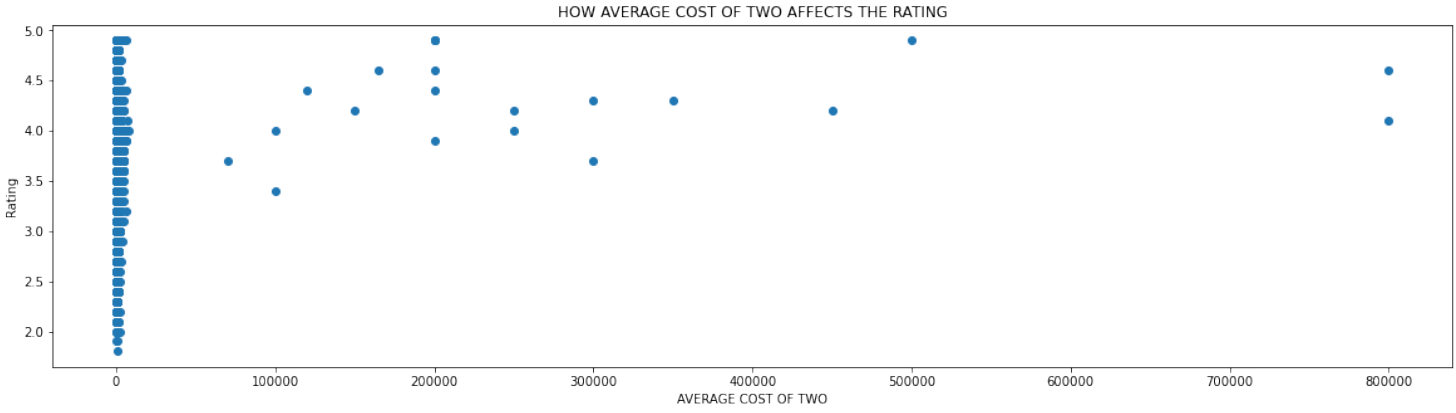
    2. Restaurant serving a greater number of cuisines.

    Solution: - More the Cuisines higher the chance to get high rating as shown in graph. A restaurants with more than 5 cuisines can easily get 3 to 5 stars while

restaurants with 1 or 2 cuisines rating can get 1 star or 5 star depends on other factors but the point is more the cuisines more rating.

3. Average cost of 2

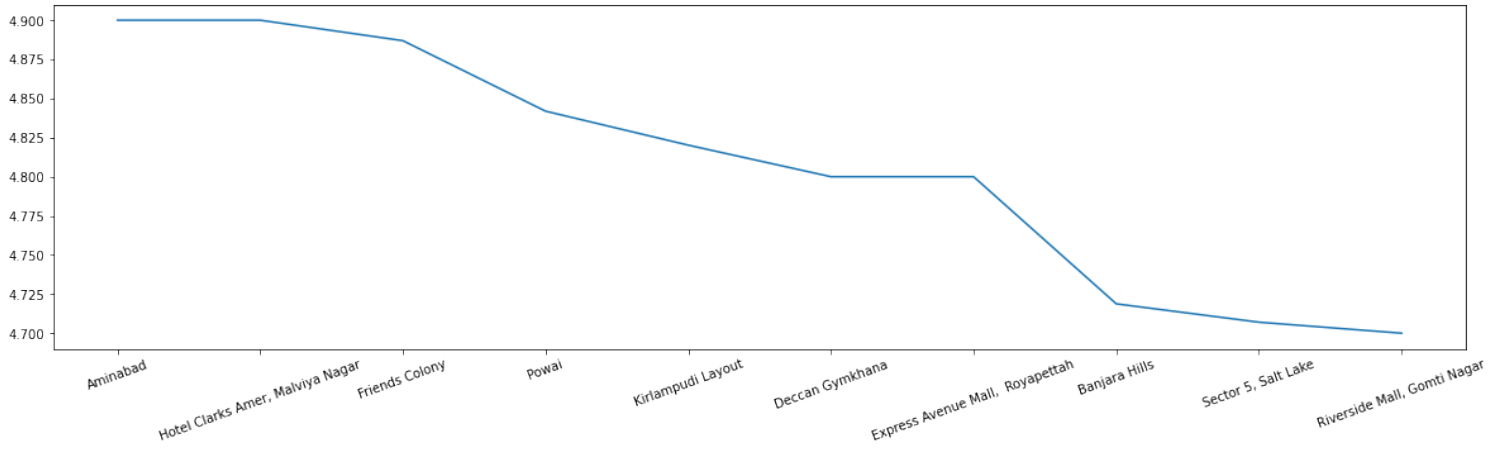
   Solution: - Higher the average cost of 2 means the restaurants is Luxury restaurants is 5star restaurant. Most of the restaurants in India has average cost of about 500 – 1000 while some luxury 5star hotels has a average cost of 80000. In the given chart it I clear that a large number of restaurants has a average cost of 500-1000 with good ratings



2. Find the weighted restaurant rating of each locality and find out the top localities with more weighted restaurant rating?

1. Weighted Restaurant Rating=Σ (number of votes * rating) / Σ (number of votes) .

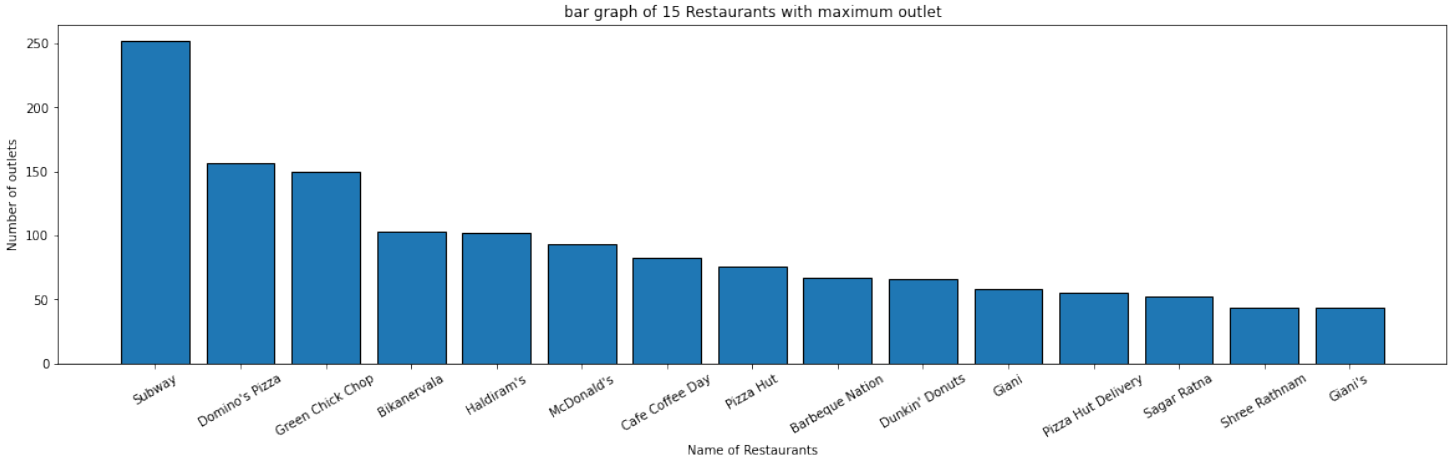
Solution: - Aminabad in Lucknow has the most weighted restaurant in across India with rating of 4.9 Weightage according Zomato.csv. Weightage is best way to get to know weather a restaurant is good or bad then aggregate rating as is it dependent on number of votes which gives more accurate results.



3. Visualization

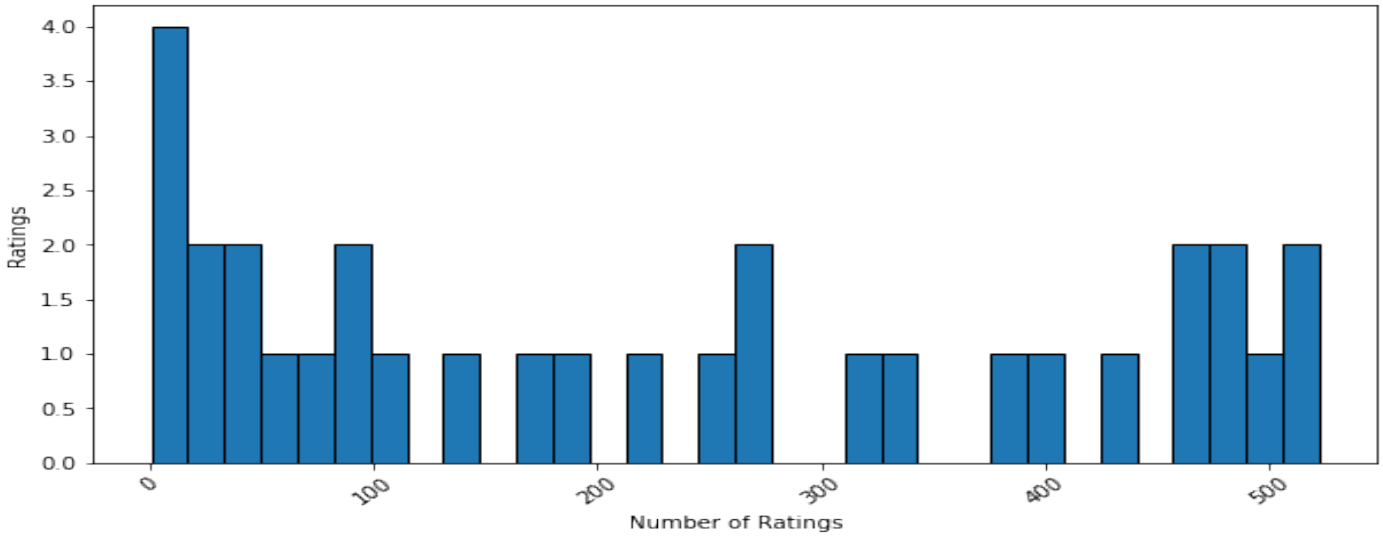
1. Plot the bar graph top 15 restaurants have a maximum number of outlets.

Solution: - The following graph contain maximum number of cuisines in India. As per graph subway has most number of cuisines of about 250 and dominoes follow with cuisines of about 150. In the list there are some famous names like McDonald's, Pizza hut, Bikanervala , Haldiram, Café Coffee day as they are India's most famous brands.



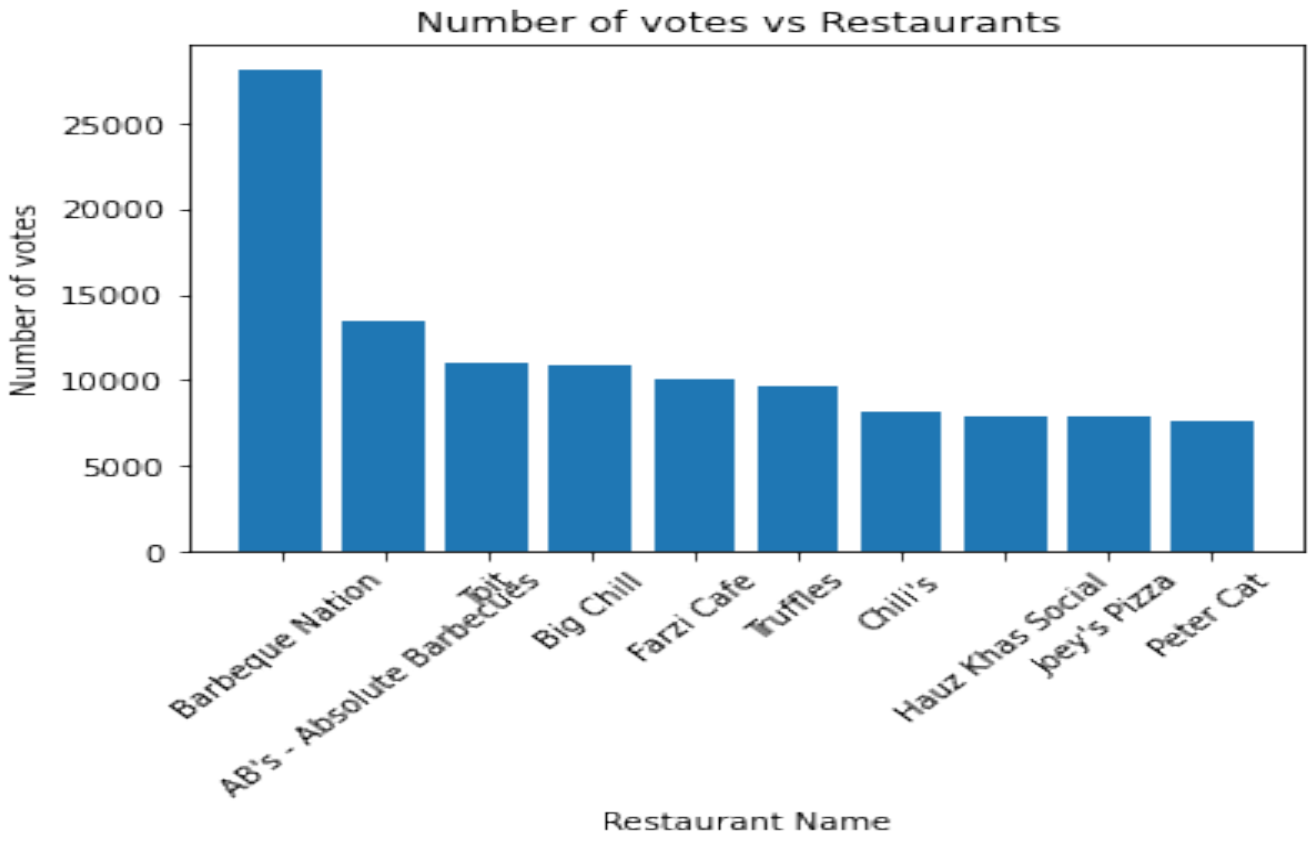
2. Plot the histogram of aggregate rating of restaurant.

Solution: - The given Histogram represent the aggregate rating of restaurants as per graph



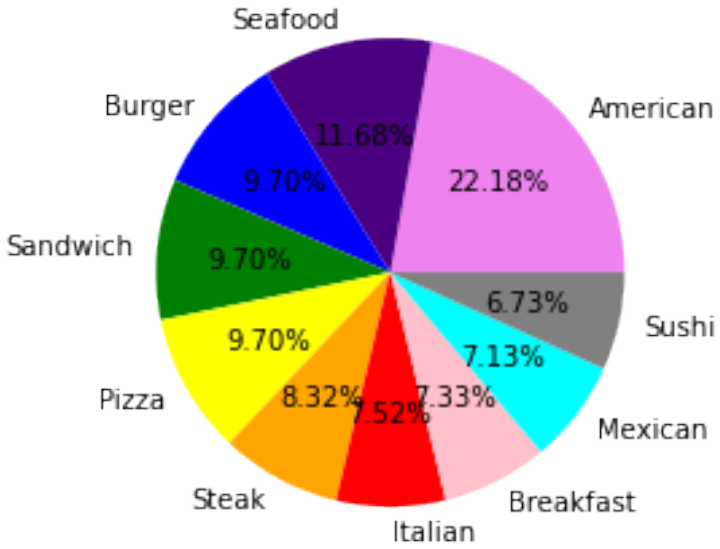
3. Plot the bar graph top 10 restaurants in the data with the highest number of votes.

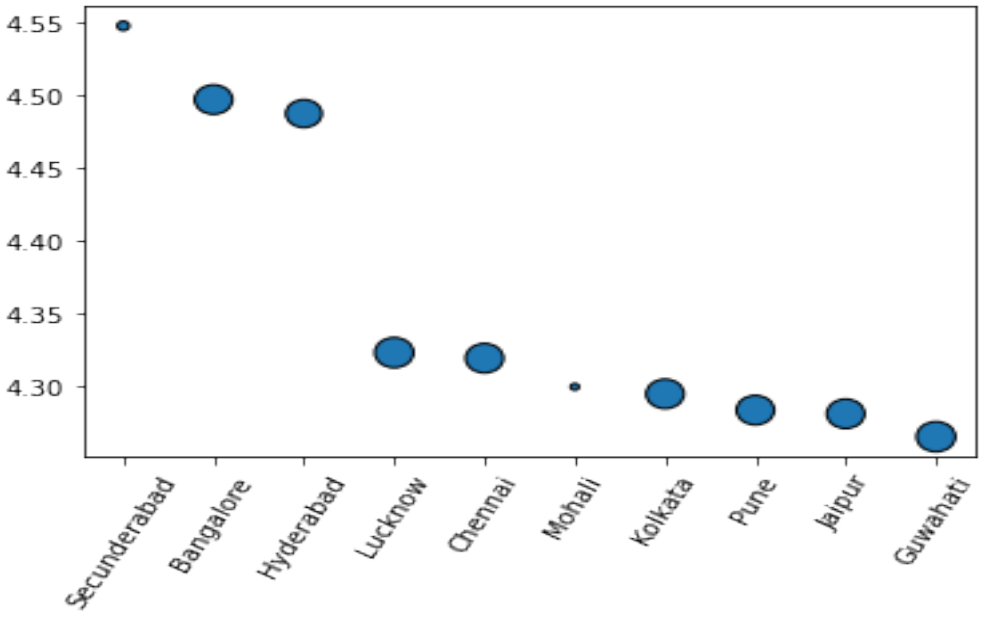
Solution: - India has a huge population and many people use Zomato. As per Zomato.csv around 25000 people vote Barbeque Nation and it is very huge number as per a country.



4. Plot the pie graph of top 10 cuisines present in restaurants in the USA

Solution: - People in USA loves American and seafood too much as per pie chart both of these two cover over 33% of total. American people loves Burger, Sandwich, Pizza, steak, Italian, breakfast, Mexican, sushi too. It is major part of their main diet.



5. Plot the bubble graph of several Restaurants present in the city of India and keeping the weighted restaurant rating of the city in a bubble

Solution: - This bubble chart shows the area, weightage and bubble size shows number of votes given multiplied by 10 to get a visible bubble. It shows major cities in India like Delhi, Bangalore, Pune, Jaipur, Mumbai has a huge number of votes with good weightage.