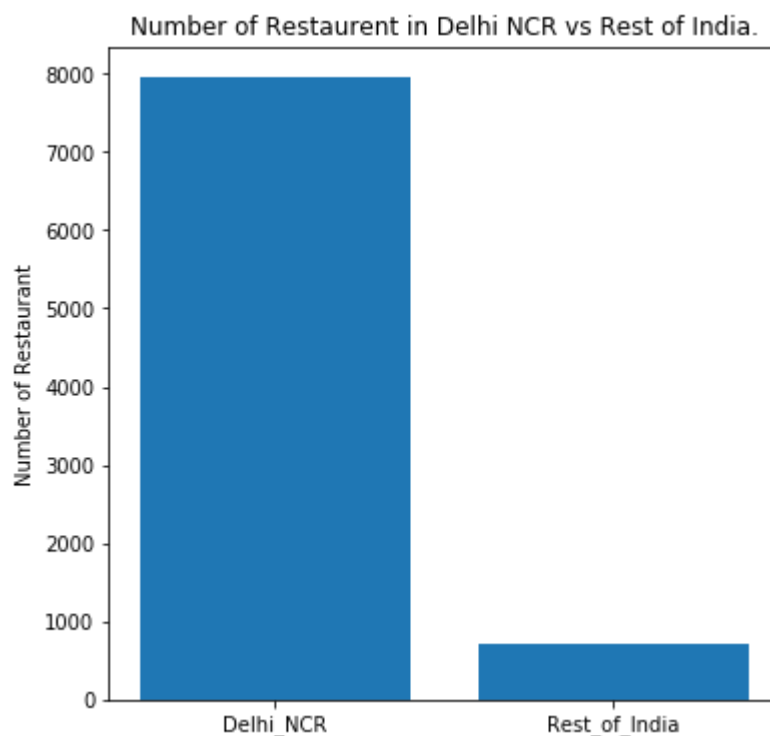


Plots And Explanations

(A) The dataset is highly skewed toward the cities included in Delhi-NCR. So, we will summarise 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.

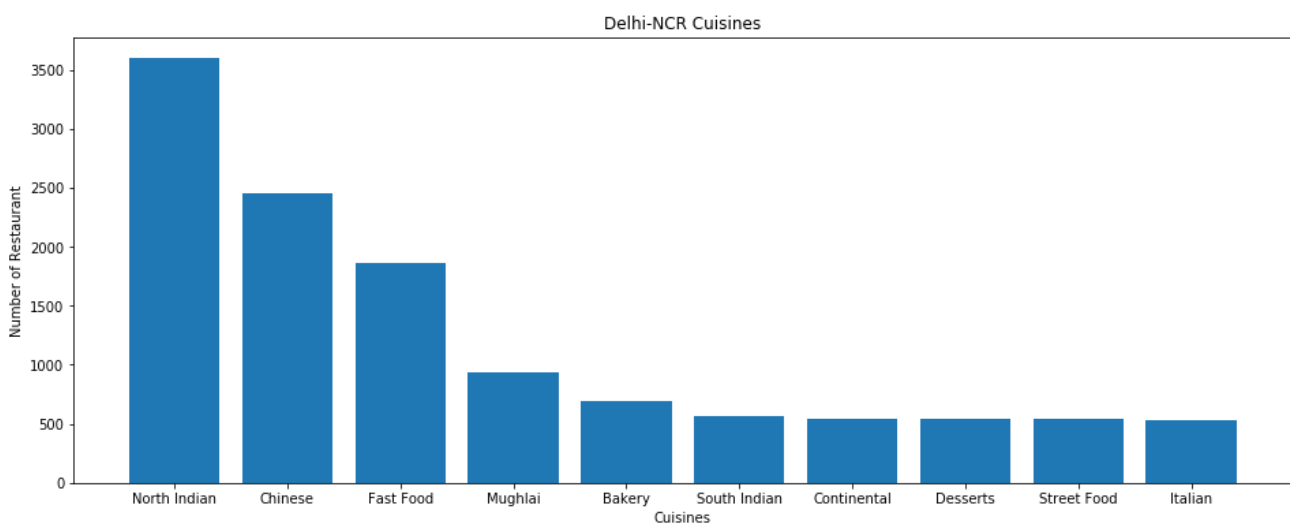
- 1. Plot the bar graph of number of restaurants present in Delhi NCR vs Rest of India.**

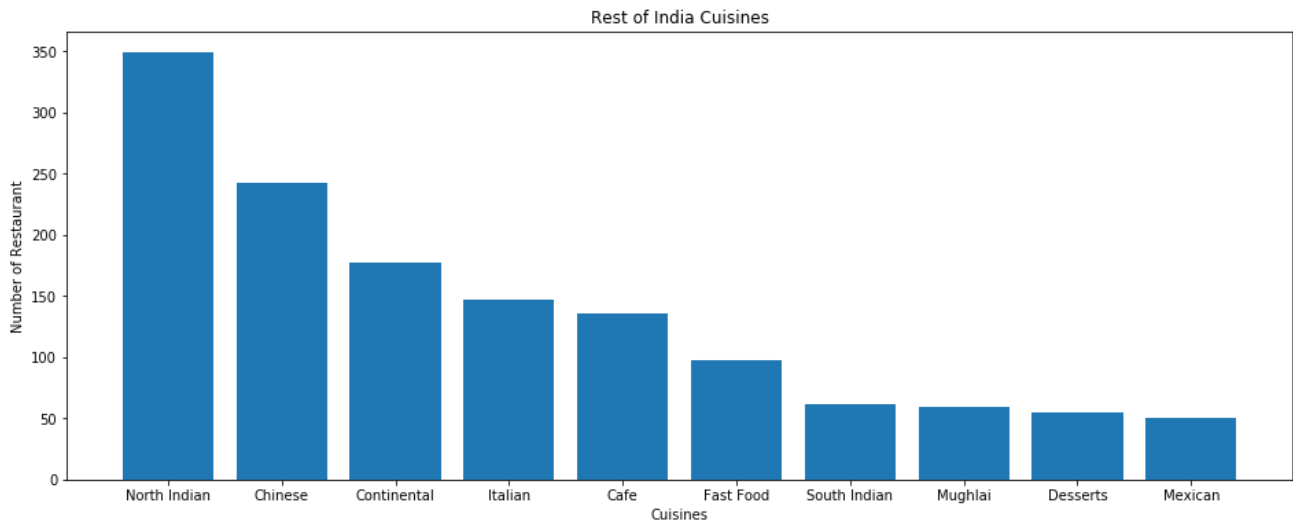


Explanations

- It is the graph of the number of restaurants available in Delhi NCR and Rest of India.
- In the Delhi NCR the five cities comes under are New Delhi, Ghaziabad, Noida, Gurgaon, Faridabad.
- As we see from the graph that in Delhi NCR there are so many number of restaurants compare to rest of the India.
- So from graph we see that maximum Zomato restaurant present in Delhi NCR

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

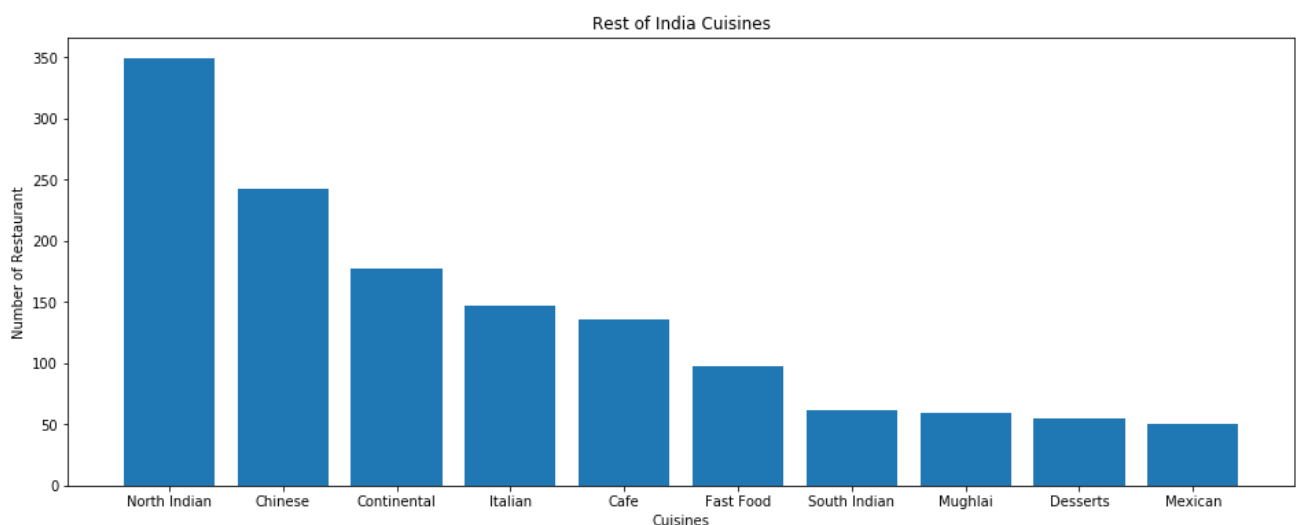
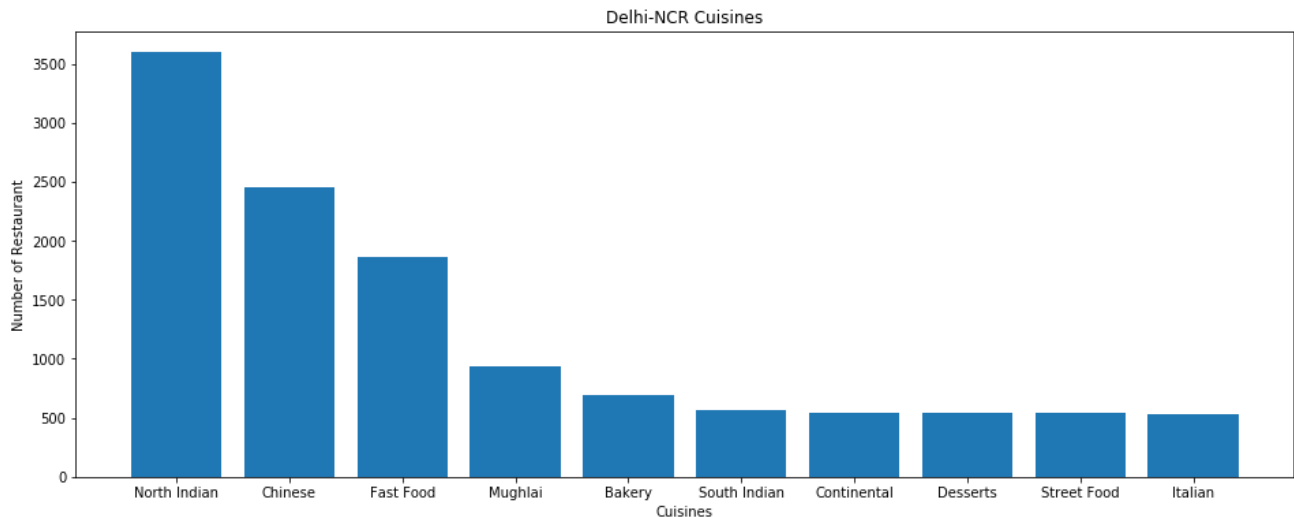




Explanations

- 1st graph for top 10 cuisines served maximum number of times in Delhi NCR and 2nd for top 10 cuisines served maximum number of time in Rest of India.
- North India is at top position in both and Chinese is at 2nd position. And at 3rd position there is Fast food in Delhi NCR and Continental in India.
- And most of the cuisines are same but the order is change.
- Bakery is at 5th position in Delhi NCR and not present in Rest of India.
- Mughlai is at 4th position in Delhi NCR and fall down 8th position 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.



Explanations

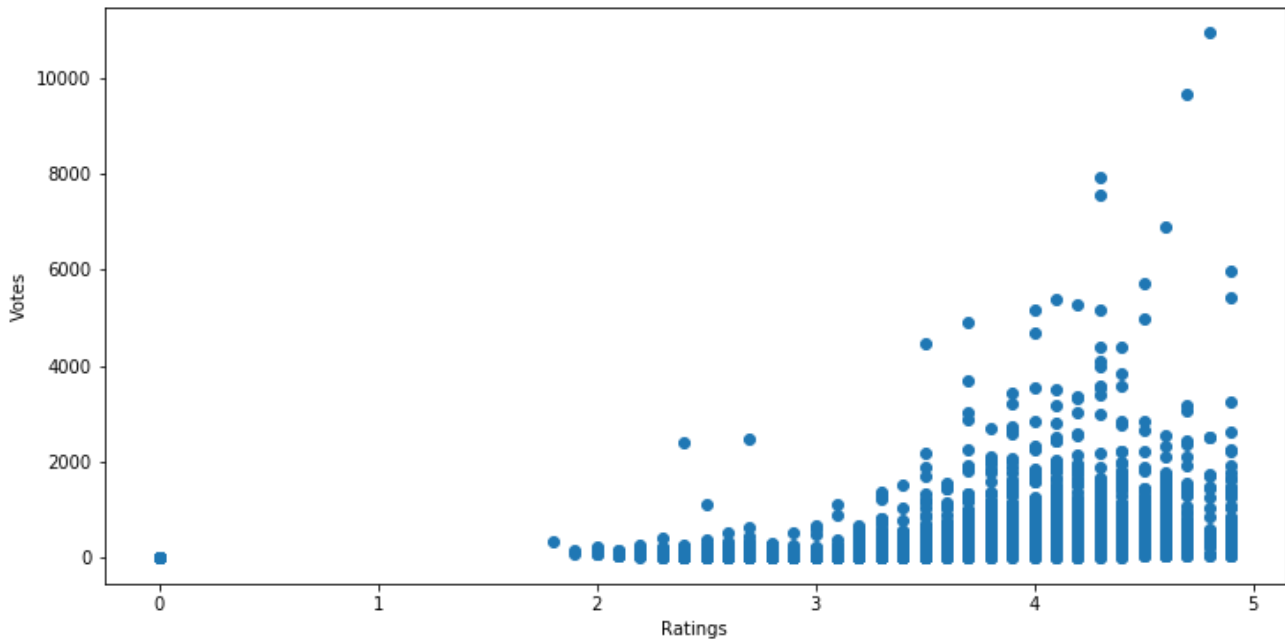
- 1st graph for top 10 cuisines served maximum number of times in Delhi NCR and 2nd for top 10 cuisines served maximum number of time in Rest of India.

- North India is at top position in both and Chinese is at 2nd position. And at 3rd position there is Fast food in Delhi NCR and Continental in India.
- And most of the cuisines are same but the order is change.
- Mughlai is at 4th position in Delhi NCR and fall down 8th position in Rest of India.
- And most of the cuisines are same but the order is change.

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

(B.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.

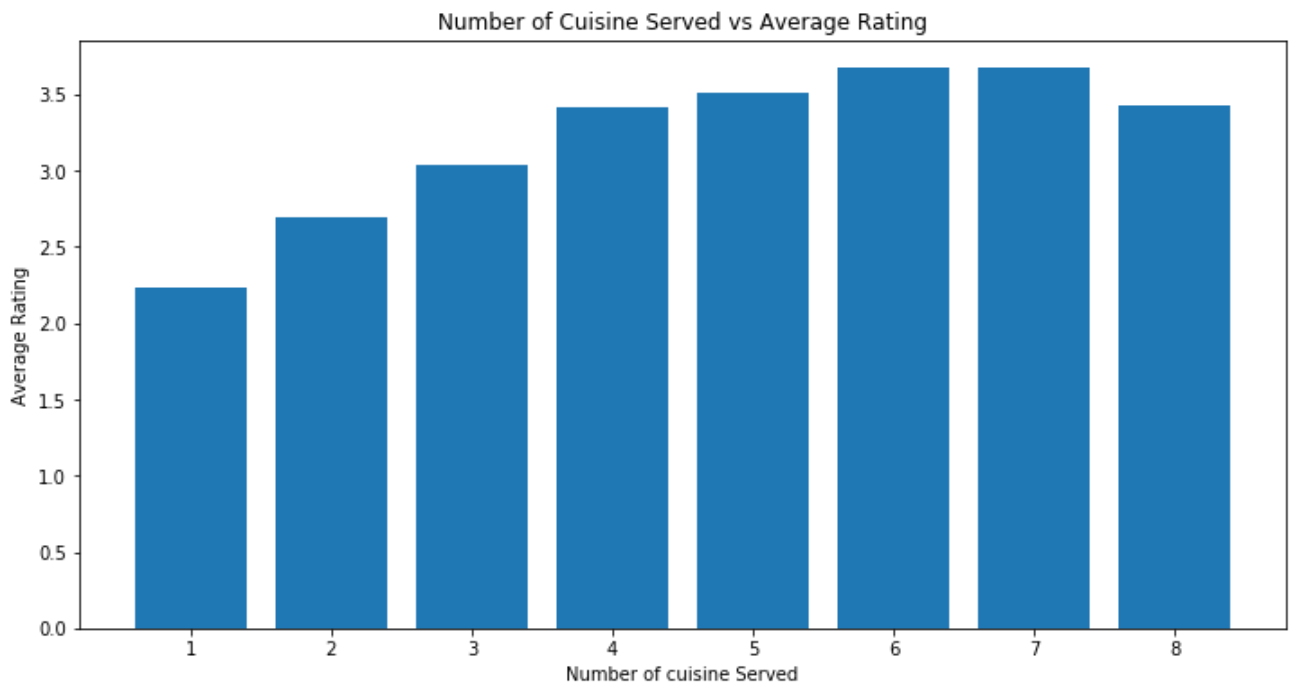
1. Number of Votes given Restaurant



Explanations

- It is the graph between the vote's vs rating of all restaurants.
- As we see in the graph that as the number of votes is increasing to a restaurant then the correspondingly its rating is also increases.
- So, more the number of votes more is the rating of the restaurant.
- But most data lies in votes 0 to 2000 and rating 3 to 5

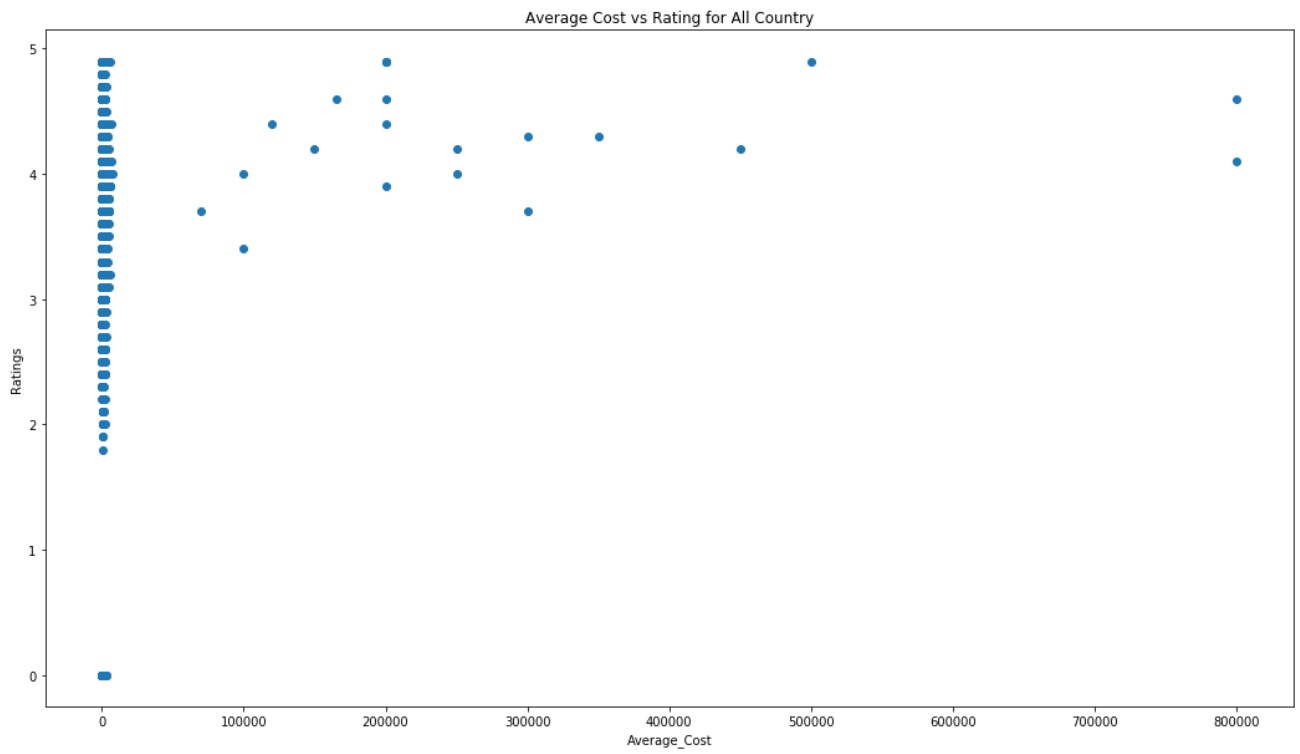
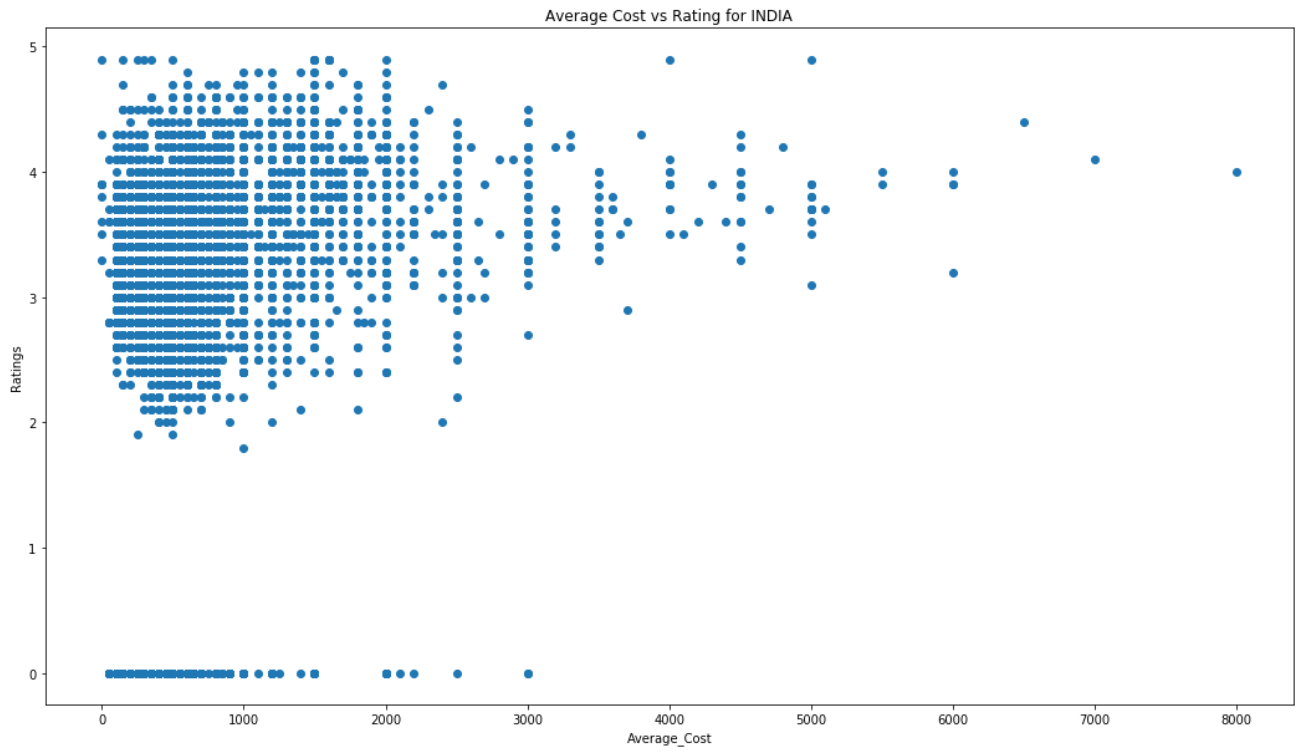
2. Restaurant serving more number of cuisines.



Explanations

- It is the graph between the rating vs number of cuisines any restaurant has.
- We plot a graph to see if the rating depends upon the number of cuisines.
- So, from this plot we see that things that how the rating is depend upon the number of cuisines each restaurant has.

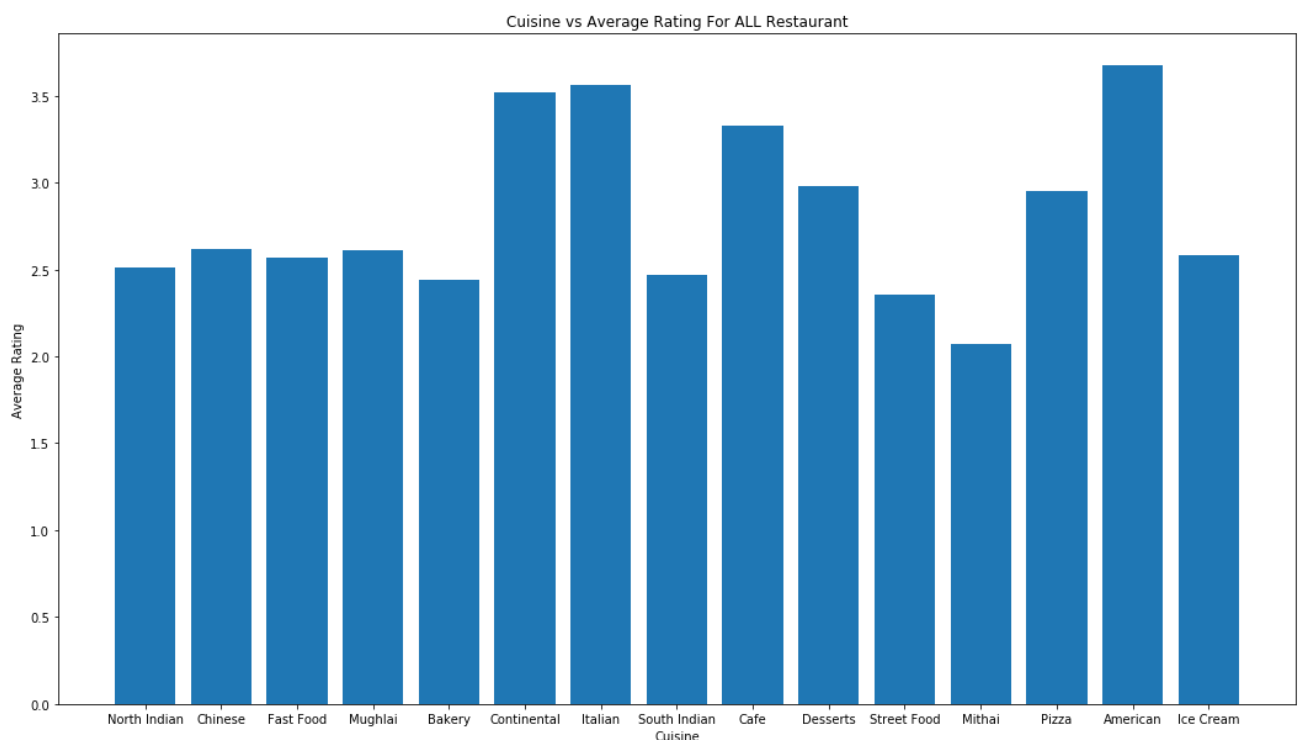
3. Average Cost of Restaurant



Explanations

- 1st graph is between Average cost and rating for India and second for Delhi
- By the graph it we conclude that most of the restaurant having rating 2.5 to 5 and cost 0 to 2000.

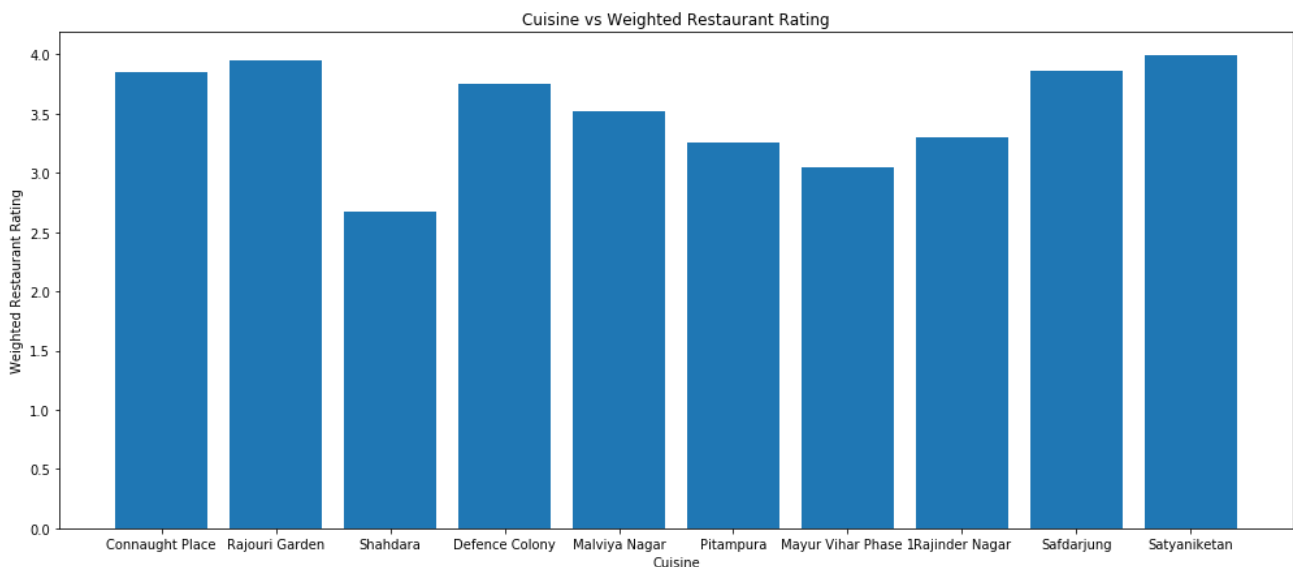
4. Restaurant serving some specific cuisines.



- These are top 15 cuisines that served maximum number of time all the restaurant.
- Calculated average rating for top cuisines and most of the cuisines having good average rating and American cuisines is at top.

(B.2) Find the weighted restaurant rating of each locality and find out the top 10 localities with more weighted restaurant rating?

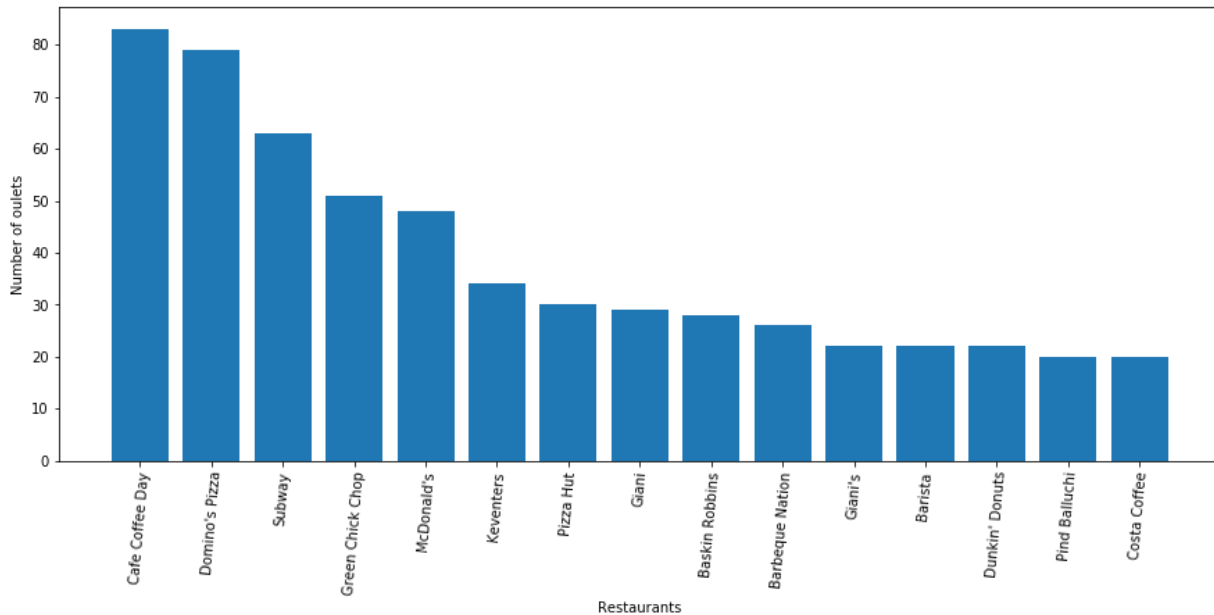
1. Weighted Restaurant Rating = $\frac{\sum (\text{number of votes} * \text{rating})}{\sum (\text{number of votes})}$.



- Calculated weighted restaurant rating for all the locality
- Draw graph for top 10 in each.
- By graph we can see that top 10 locality having good weighted restaurant rating.

(C) Visualization

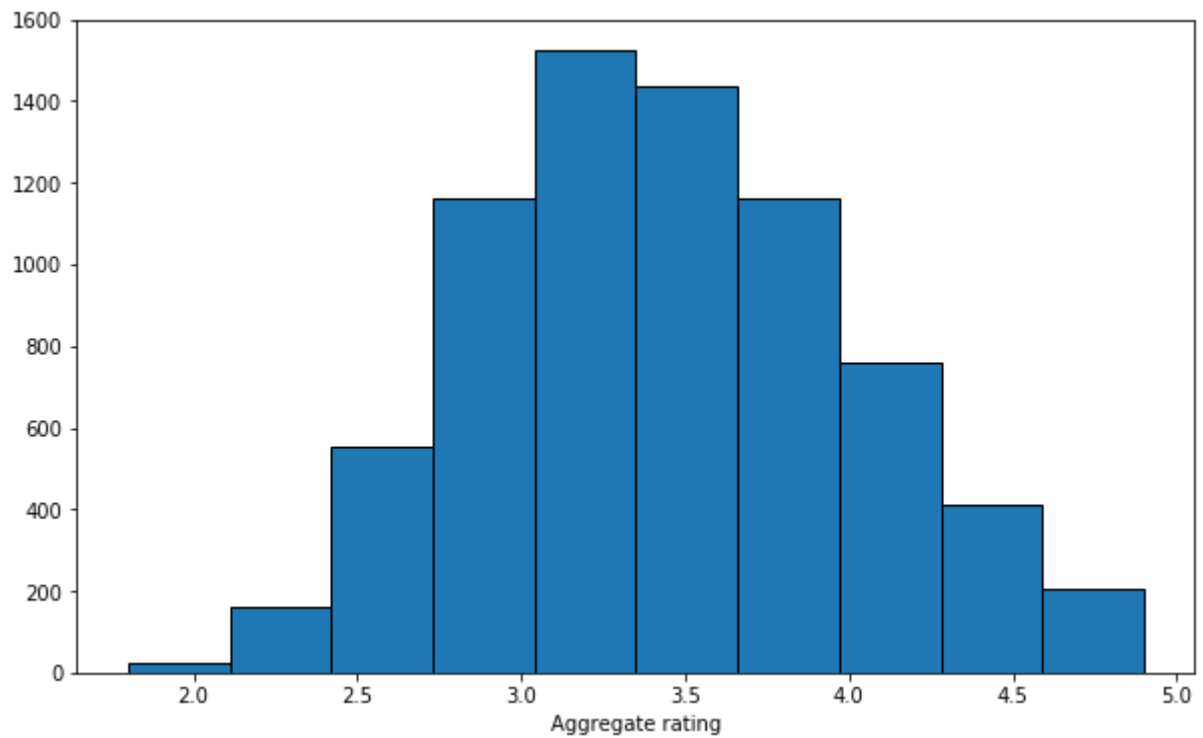
1. Plot the bar graph top 15 restaurants have a maximum number of outlets.



Explanations

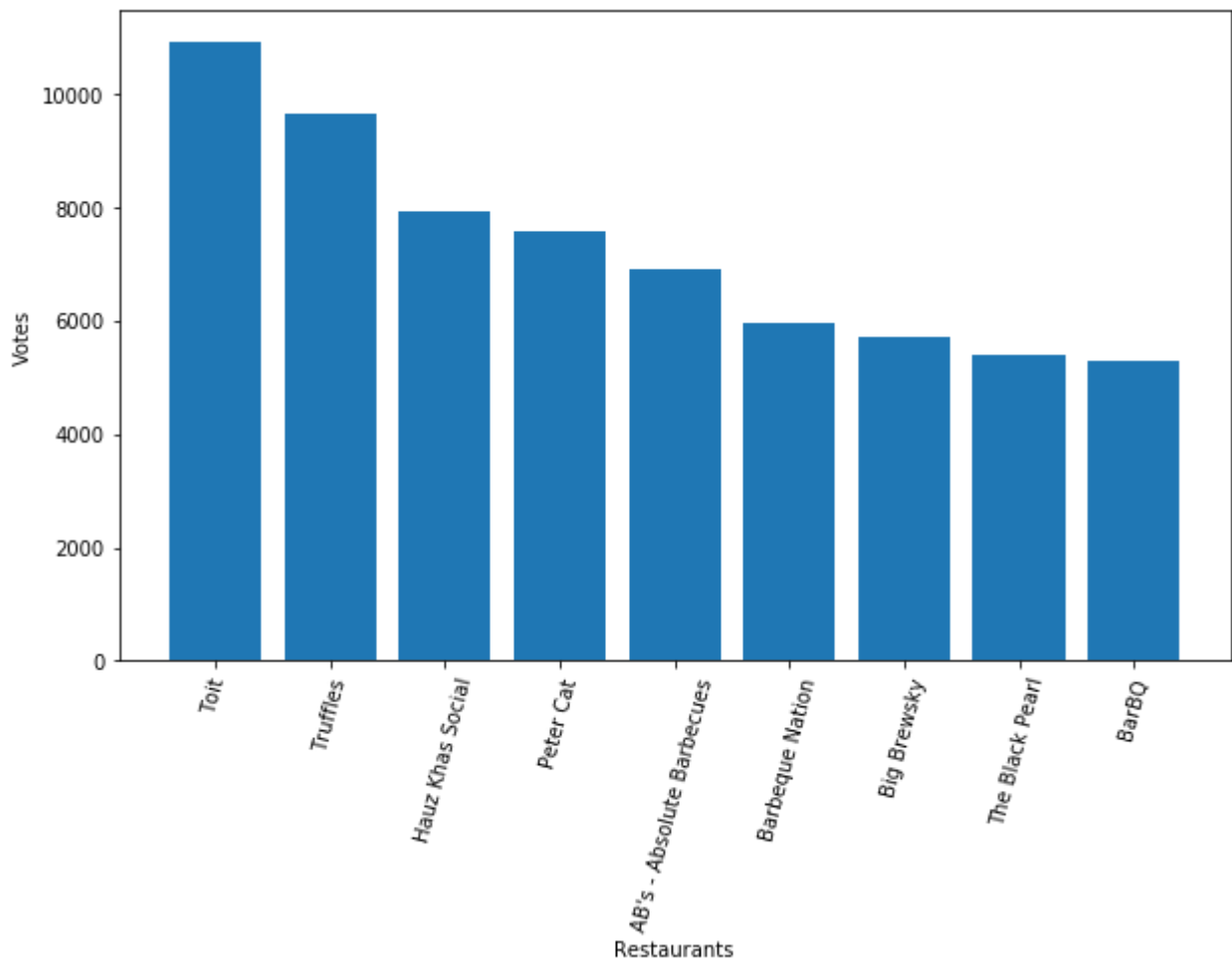
- These are the top 15 restaurant that have maximum outlets.
- Café coffee is at 1st position and have more than 80 outlets.

2. Plot the histogram of aggregate rating of restaurant(drop the unrated restaurant).



- Histogram graph between aggregating rating and number of votes.
- Restaurant having Aggregate rating 3 to 4 have more number of votes.

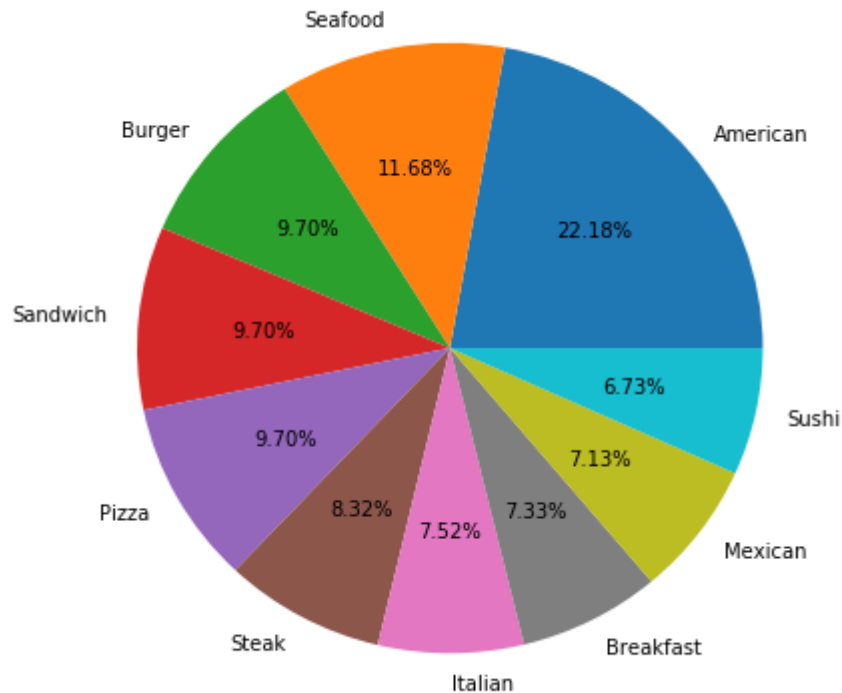
3. Plot the bar graph top 10 restaurants in the data with the highest number of votes.



Explanations

- It is the graph between top 10 restaurants having highest number of votes.
- As we see from the graph Toit is the restaurant having maximum number of votes.

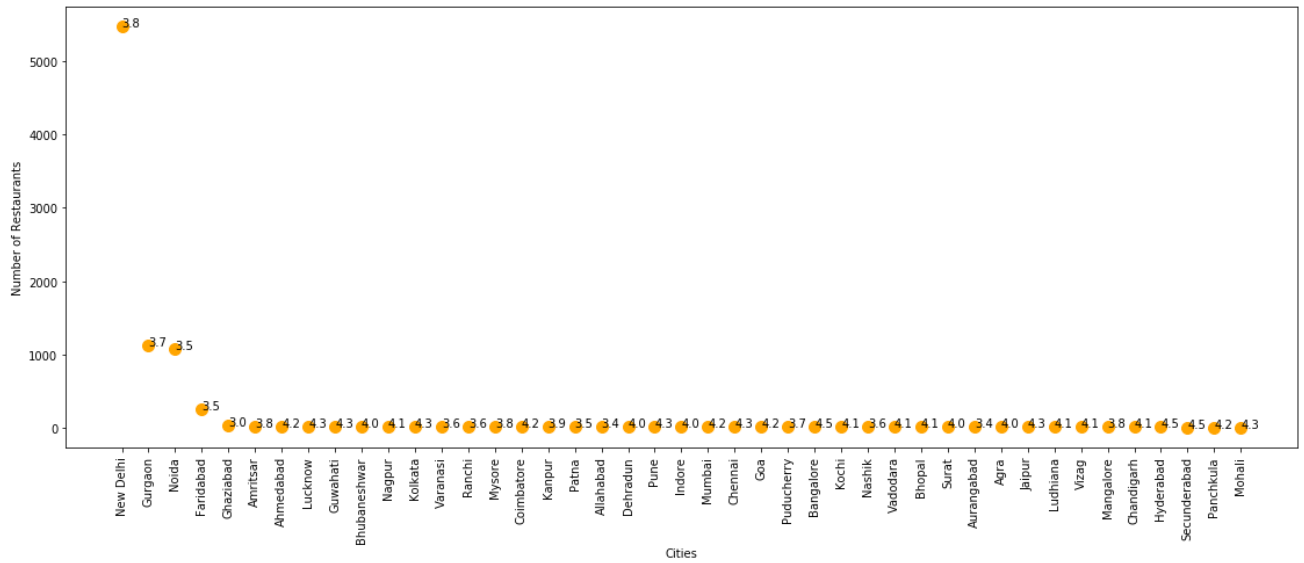
4. Plot the pie graph of top 10 cuisines present in restaurants in the USA.



Explanations

- It is pie chart representing top cuisines in USA.
- It is representing the top cuisines means which is available in more number of restaurants.
- As we see from the pie chart that American cuisine at highest in the pie chart which means this cuisine is available in more number of restaurants.

5. Plot the 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.



Explanations

- It is the graph between the number of cities vs the number of restaurants.
- In this graph represent each city of India have how many number of restaurants in it.
- So from graph we observe that New Delhi has the maximum number of restaurants.
- And it's the Bubble Graph.
- In which I put all the weighted restaurant rating in the bubble.