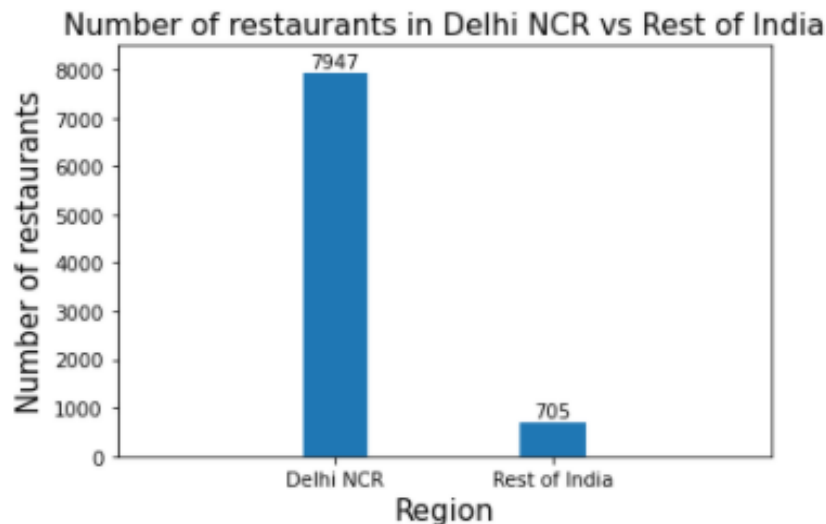


## Question 1 : The dataset is highly skewed toward the cities included in Delhi\_NCR

### 1.1 number of restaurants present in Delhi NCR v/s Rest of India.

We have a dataset which skewed towards Delhi\_NCR region than rest of India which can clearly be shown by the bar graph.

The graph depict that in Delhi\_NCR there are 7947 restaurants present whereas in rest of India the number of restaurant in only 705 which is not even 10% of number of restaurants in Delhi\_NCR.



### 1.2 cuisines which are not present in restaurant of Delhi NCR but present in rest of India

It can be found that there are four cuisines which are present in rest of India but not in Delhi\_NCR according to the given datasets.

After getting all the cuisines using API, it can be found that there are 2 cuisines which can be found from API but they are not there in given dataset.

Hence, It can be concluded that the dataset is incomplete.

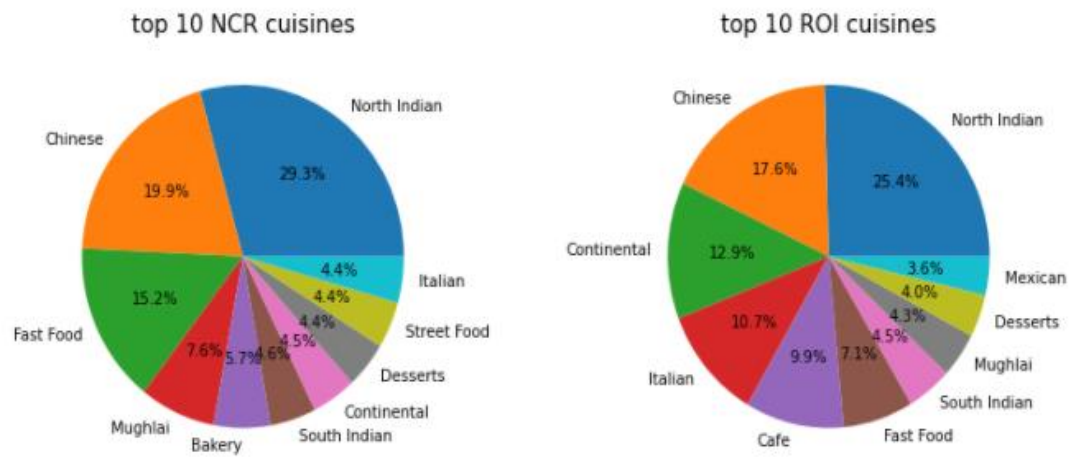
```
cuisines which were not in NCR but in Rest of India: {'Cajun', 'German', 'BBQ', 'Malwani'}  
cuisines which are in API but not in dataset: {'BBQ', 'Malwani'}
```

### 1.3 top 10 cuisines served by Delhi\_NCR and Rest of India

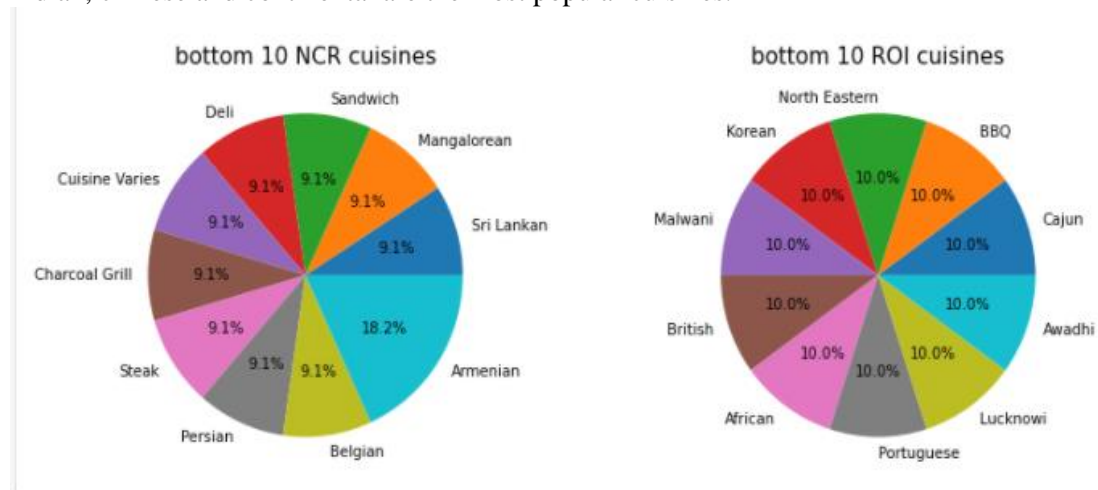
Followings are the top 10 cuisines served by restaurants in Delhi\_NCR and rest of India

```
top 10 cuisines in restaurants of in NCR  
North Indian 3597  
Chinese 2448  
Fast Food 1866  
Mughlai 933  
Bakery 697  
South Indian 569  
Continental 547  
Desserts 542  
Street Food 538  
Italian 535  
  
top 10 cuisines in restaurants of in rest of India  
North Indian 349  
Chinese 242  
Continental 177  
Italian 147  
Cafe 136  
Fast Food 97  
South Indian 62  
Mughlai 59  
Desserts 55  
Mexican 50
```

## 1.4 analysis of how cuisine served is different from Delhi NCR to Rest of India



It can be said that almost similar cuisines can be observed, but in rest of India people likes **café** whereas in Delhi\_NCR **street food** is more famous. Other than this cuisine, all 9 cuisines are there in both the list. In Delhi\_NCR north India, chinese, and fast food are top 3 whereas in rest of India north Indian, chinese and continental are the most popular cuisines.

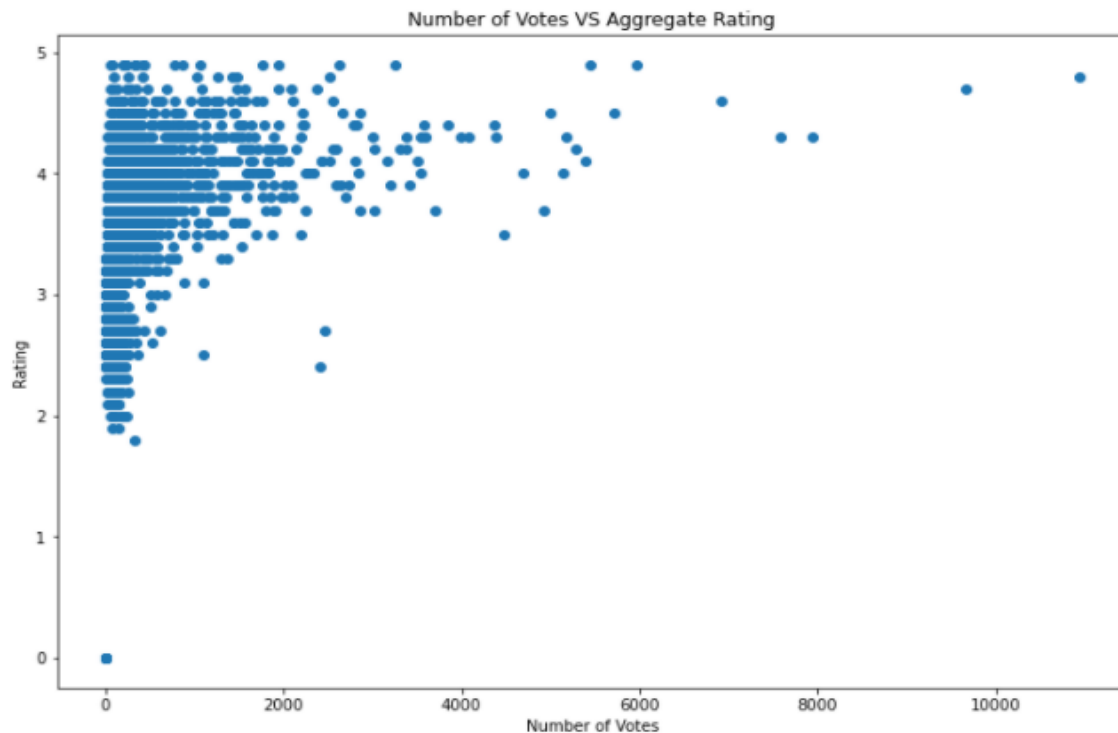


Above graph is for bottom 10 cuisines in restaurants of Delhi\_NCR and rest of India. There is nothing common in bottom 10 list of cuisines in restaurants of both regions. Here each cuisine is having similar percentage, that is due to Most of the cuisines have just one restaurant serving these cuisines.

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

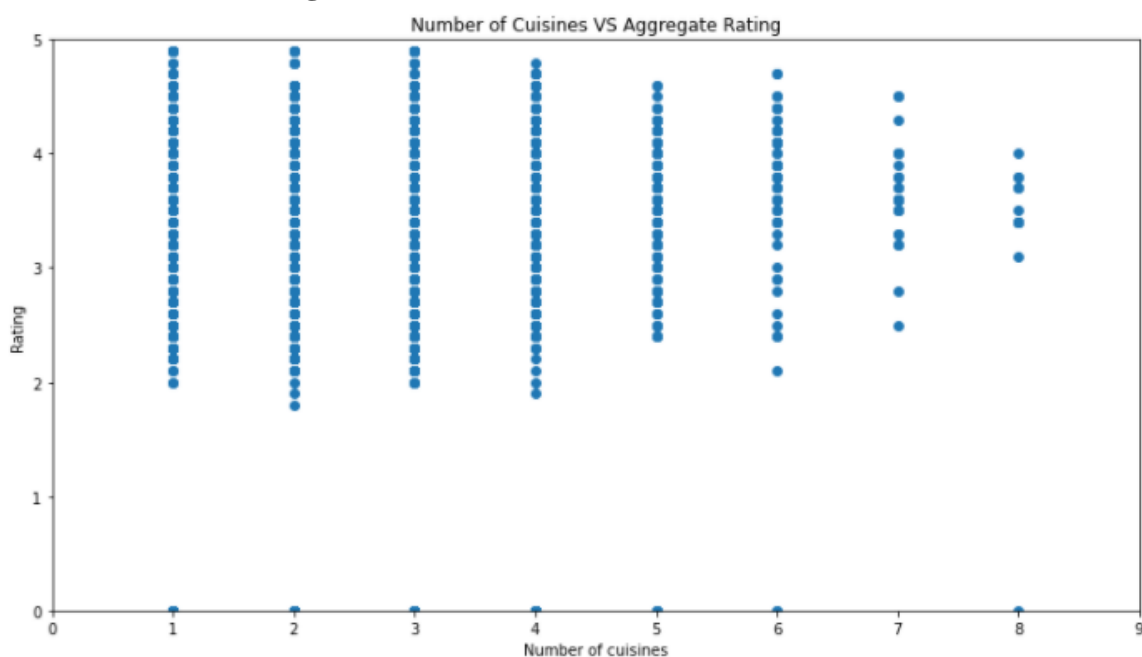
2.1 Write a short detail analysis of how the rating is affected by restaurant due following features: Plot a suitable graph to explain your inference.

### 2.1.1 number of votes given restaurants.



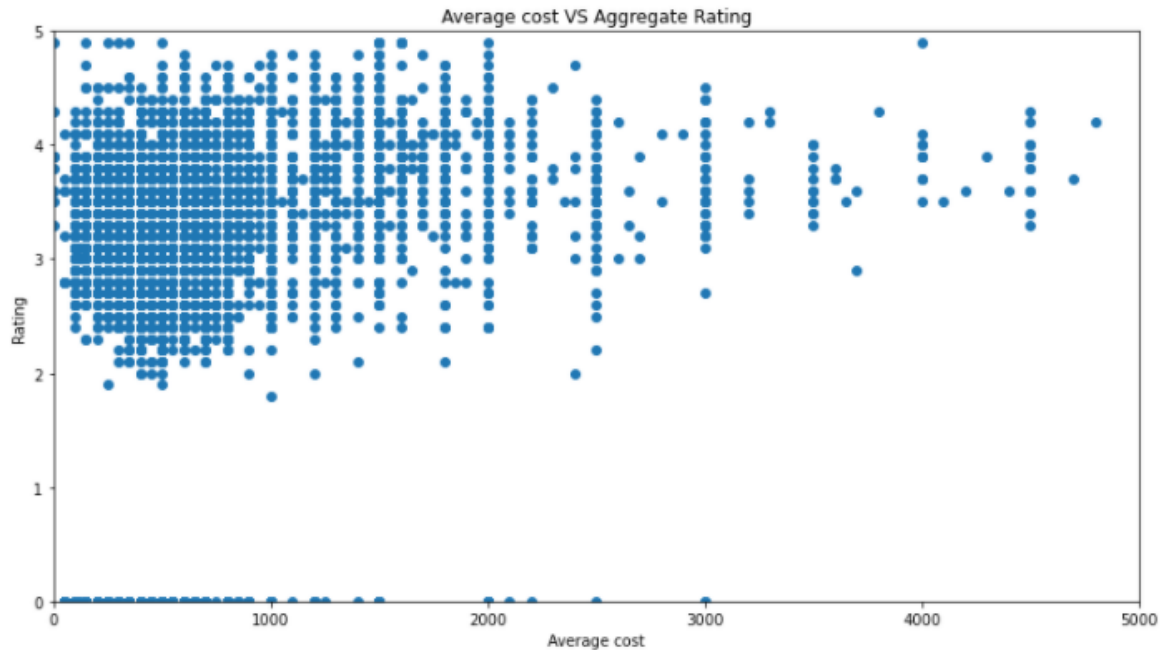
Above graph of rating v/s number of votes depicts no strong trend. We are getting random data. But, one thing can be said that there is no restaurant with total votes greater than 3000 whose rating is less than 3.0. so higher the number of votes reduces the chances of getting the rating less than 3.0. With higher no. of votes it is clear that that particular restaurant is famous and getting the desired crowd and that can be the reason for its high rating.

### 2.1.2 restaurant serving more number of cuisines.



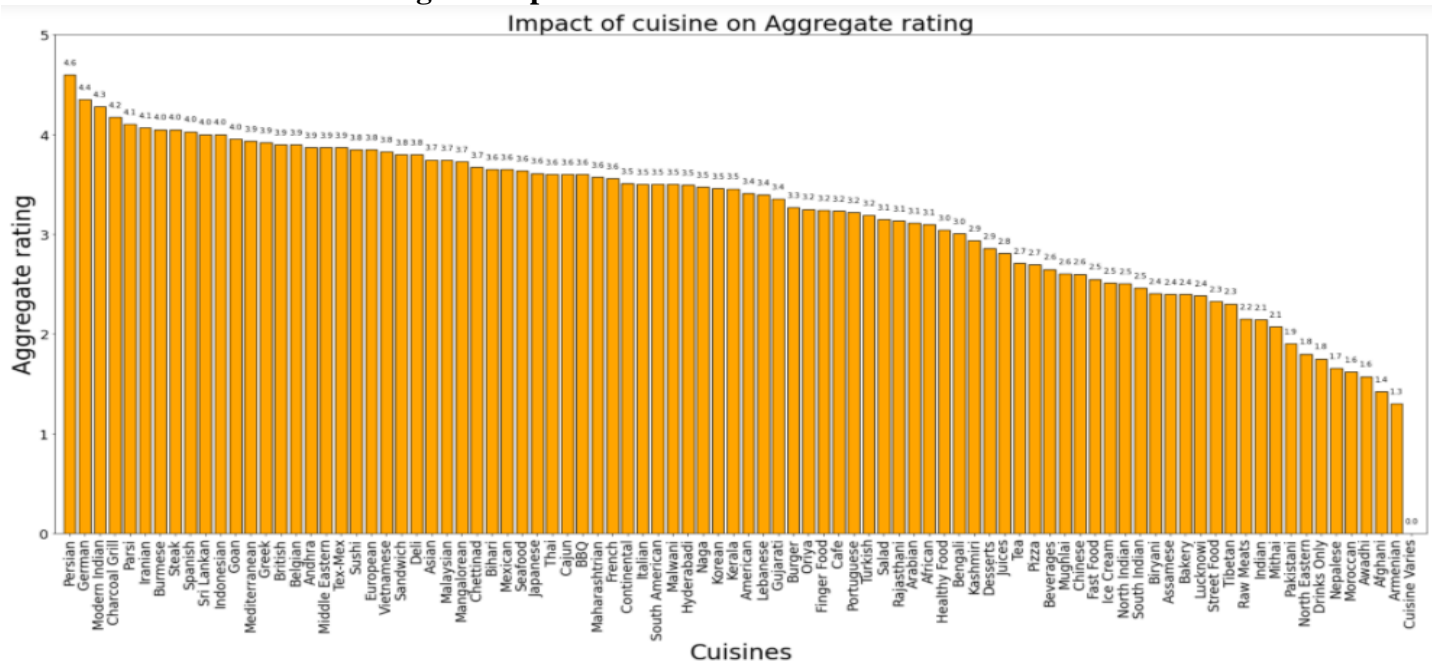
From above graph we cannot say anything conclusively but just one minor observation can be seen that as no. of cuisines are increasing the rating is not going to the top as it is observed that in case of lower no. of cuisines. And the variance is also reducing as no. of cuisines are increasing.

### 2.1.3 average cost of restaurant



From above graph it is clear that there is no clear trend or clear relation between rating and average cost. But, we can say that where cost is high a particular class of people are going to that restaurants which reflects that in low variance for higher cost.

### 2.1.4 restaurants serving some specific cuisines.



From above graph it can be seen that there is no effect of cuisine on rating.

We can say that **armenian** cuisine has got minimum rating whereas **Persian** cuisine has got the highest rating.

So it can be said that restaurants having **Persian, german, modern Indian, charcoal grill, parsi, Iranian** cuisines

## 2.2 top 10 localities with more weighted restaurant rating

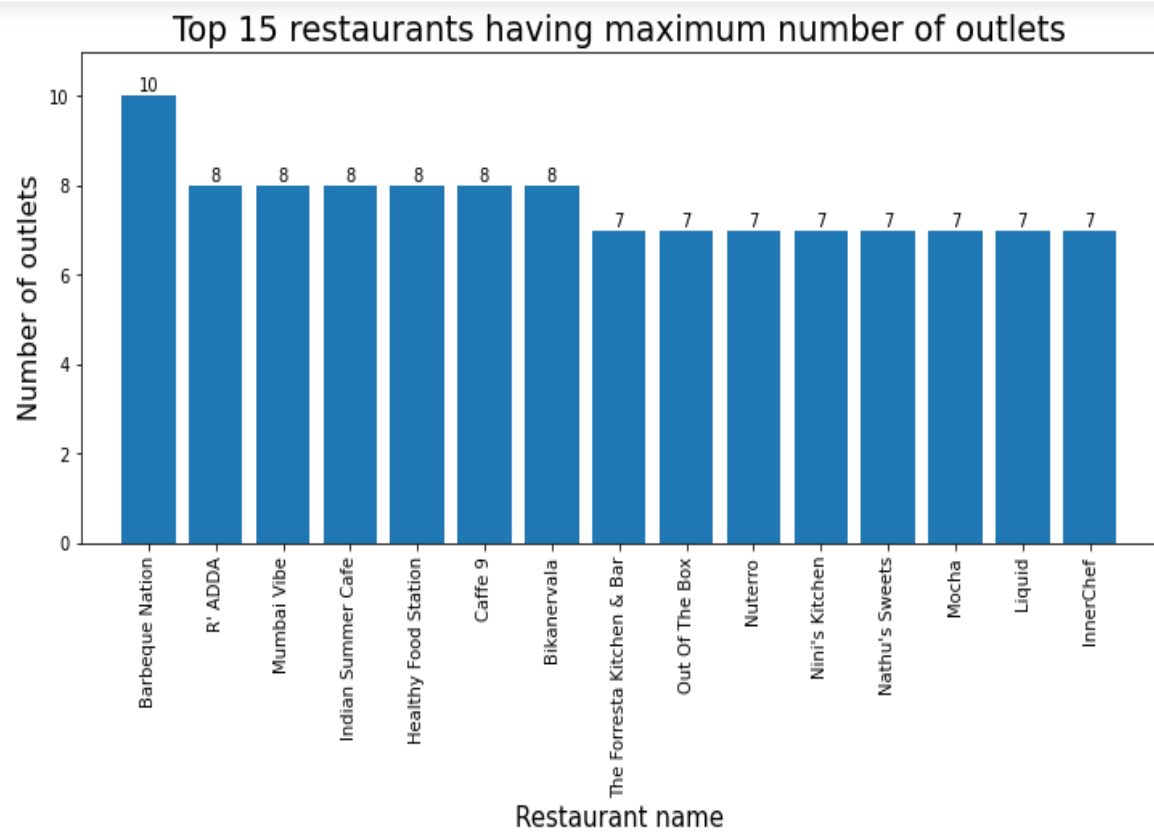
---

Aminabad 4.9  
Friends Colony 4.89  
Express Avenue Mall, Royapettah 4.8  
Deccan Gymkhana 4.8  
Sector 5, Salt Lake 4.71  
Chittoor Road 4.6  
Arambol 4.6  
Marathahalli 4.58  
Anjuna 4.54  
Ellis Bridge 4.44

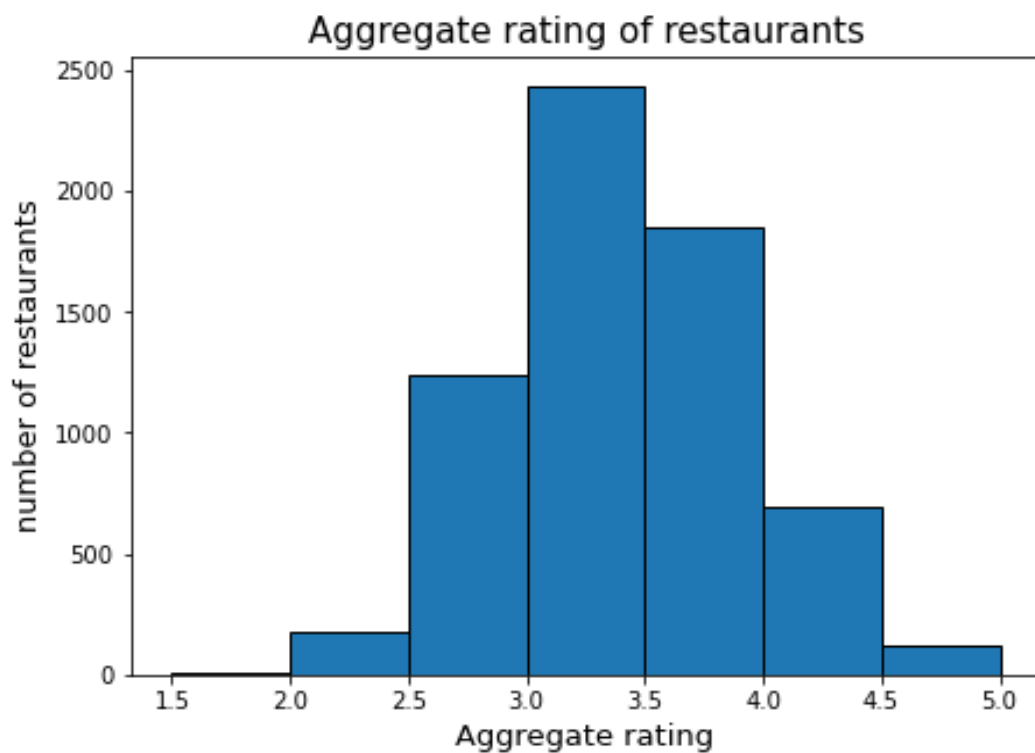
Above picture shows the top 10 localities with more weighted restaurant rating. **Aminabad** is locality with the most weighted restaurant rating.

### Question 3 : Visualization

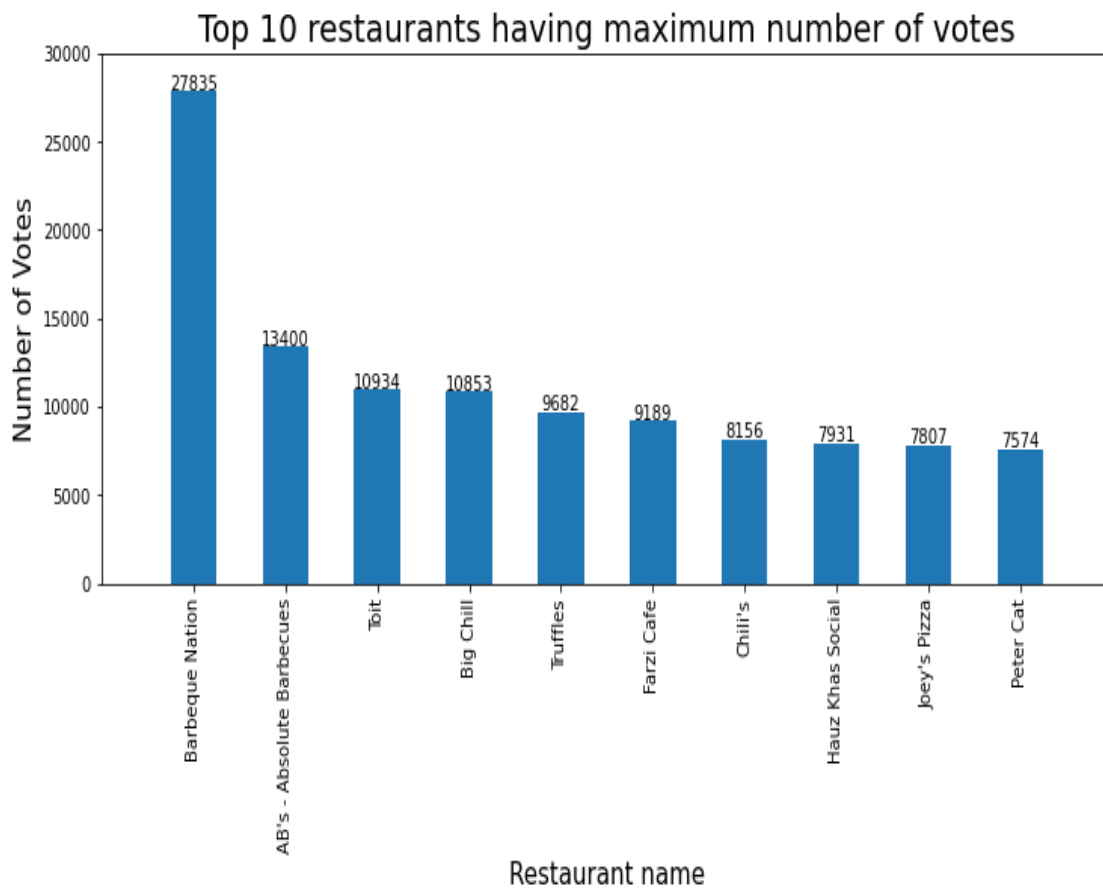
#### 3.1 bar graph of top 15 restaurants have a maximum number of outlets



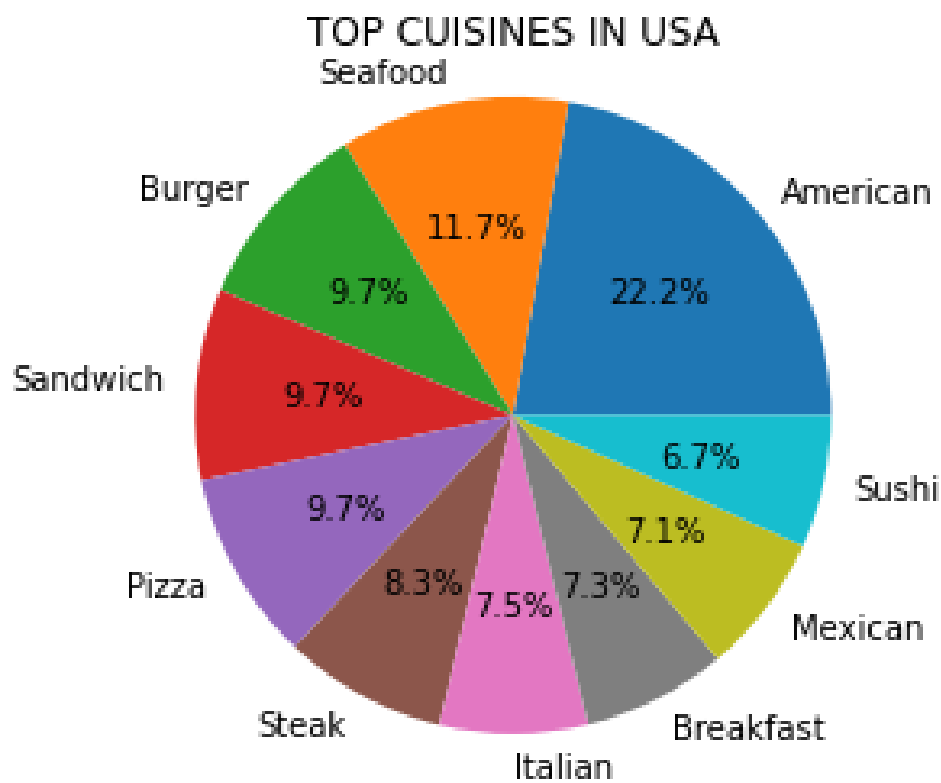
#### 3.2 histogram of aggregate rating of restaurant



### 3.3 bar graph top 10 restaurants in the data with the highest number of votes.

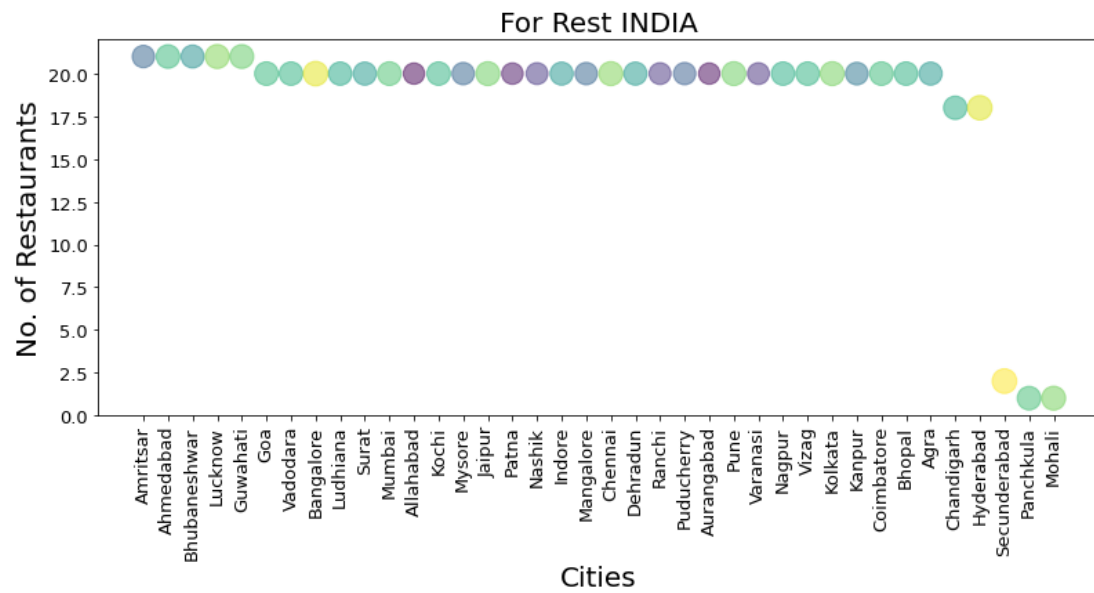


### 3.4 pie graph of top 10 cuisines present in restaurants in the USA.



### 3.5 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

- For rest of India cities



- For Delhi\_NCR region

