

# VAQUAR SHAIKH

## PROJECT REPORT

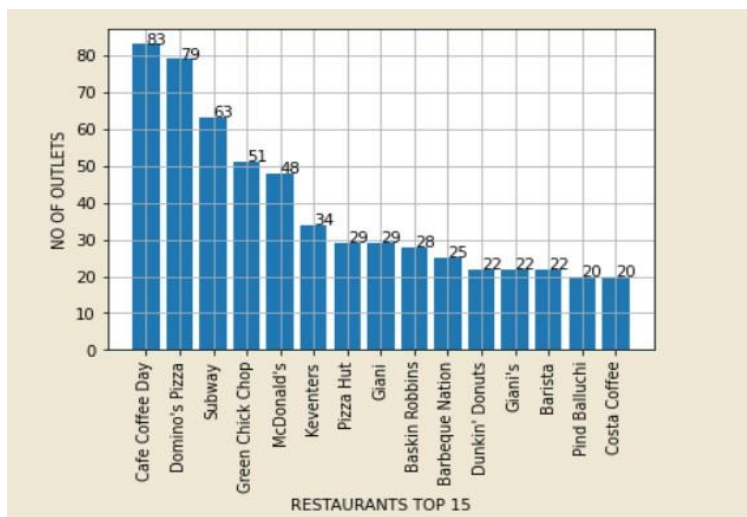
### ZOMATO API

#### QUESTION 3 : Visualization

**Q 3.1 :** Plot the bar graph top 15 restaurants have a maximum number of outlets.

##### JUSTIFICATION:

This part is highly skewed to Indian cities . I have maintained a dictionary in which I have mapped the restaurant name as key and number of restaurants as the value to the specific key(restaurant name )



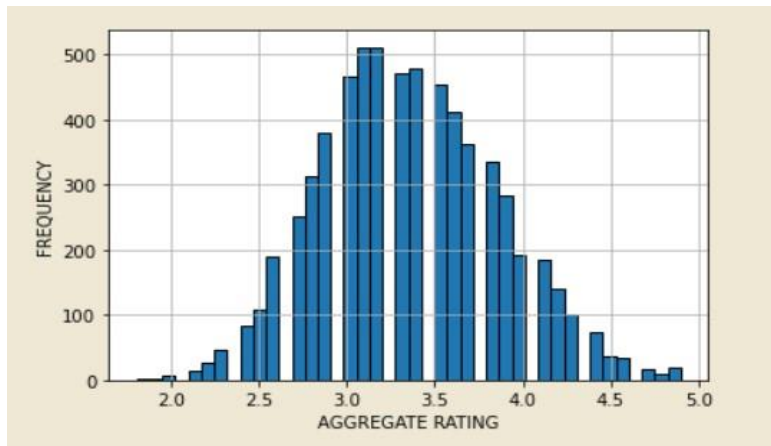
##### INFERENCE :

It has been observed that Café Coffee Day has the highest number of outlets with 83 outlets and Costa coffee bags 15<sup>th</sup> position with 20 outlets . Top three restaurants with highest number of outlets are café coffee day , domino's pizza and subway .

**Q 3.2** Plot the histogram of aggregate rating of restaurant( drop the unrated restaurant).

JUSTIFICATION :

For getting the histogram (frequency diagram) , I have fetched the values which are rated . As mentioned in the question , I have not mentioned the unrated values .



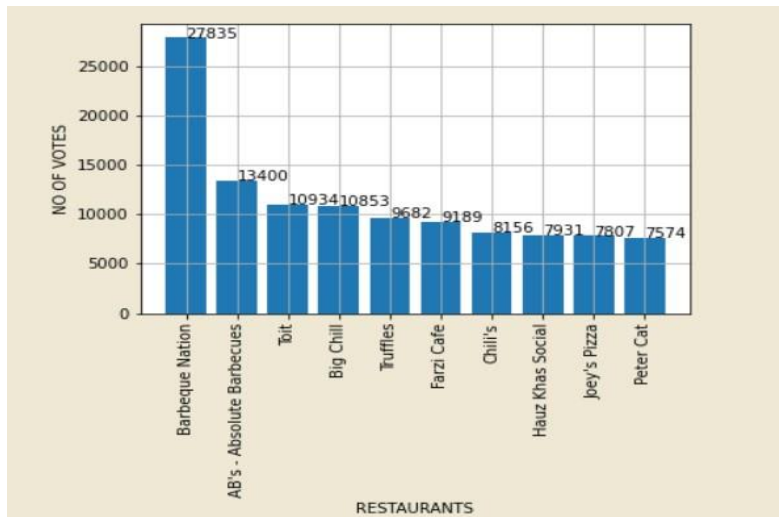
INFERENCE :

On plotting , it has been observed that most of the ratings are between 3 to 3.5 . This means that most restaurants have a rating between 3 to 3.5 in a broader sense , till 4.0 . There are quite few restaurants with a rating between 4.5 to 5 .

**Q 3.3** Plot the bar graph top 10 restaurants in the data with the highest number of votes.

JUSTIFICATION :

I have mentioned a simple dictionary with the key value as the name of the restaurant and value is mapped as the count of number of votes of the given restaurant . sorted them in reverse order to get maximum 10 values .



INFERENCE :

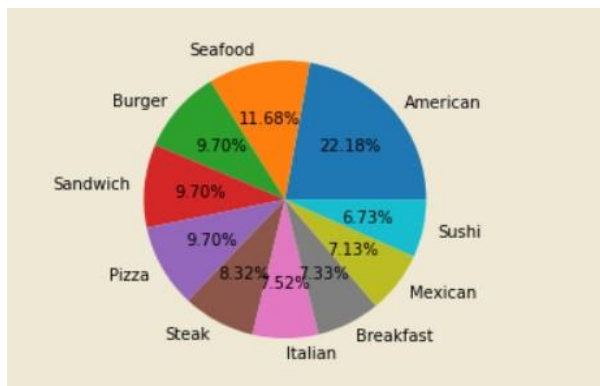
The top 10 restaurants are :

- 1) Barbeque Nation
- 2) AB's Absolute Barbeque
- 3) Toit
- 4) Big Chill
- 5) Truffles
- 6) Farzi Café
- 7) Chill's
- 8) Hauz Khas Social
- 9) Joey's Pizza
- 10) Peter Cat

**Q3.4** Plot the pie graph of top 10 cuisines present in restaurants in the USA.

JUSTIFICATION :

Country code for USA is 216 (found on Zomato API) . There were a lot of rows where the cuisine was not mentioned (no value at all) there were NaN values. I removed the NaN values first and then maintained a dictionary in which the specific cuisine is mapped to the number of restaurants serving the specific cuisine . Sorted the dictionary in reverse order , picked up top 10 cuisines and plotted a pie chart .



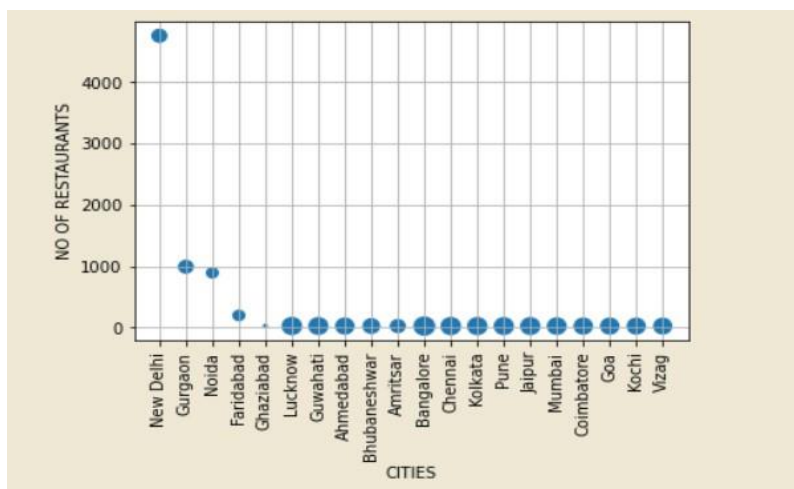
INFERENCE :

The cuisine entitled with “American” is the highest serving cuisine in USA . the cuisine Sushi bags the tenth position among the top ten cuisines served in USA .

**Q 3.5** 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.

JUSTIFICATION :

As mentioned in question number two I have calculated the weighted average for each and every city in India . x axis being the name of the Indian cities and y axis being the number of restaurants in the specific city . The bubble size represents the weighted average rating . I have subtracted the ratings by so the bubble size looks presentable , also made the negative values positive so indices do not go out of range .



INFERENCE :

The top 20 localities are :

- 1 New Delhi 3.77
- 2 Gurgaon 3.74
- 3 Noida 3.47
- 4 Faridabad 3.48
- 5 Ghaziabad 3.04
- 6 Lucknow 4.32
- 7 Guwahati 4.27
- 8 Ahmedabad 4.16
- 9 Bhubaneswar 3.97
- 10 Amritsar 3.76
- 11 Bangalore 4.5
- 12 Chennai 4.32
- 13 Kolkata 4.3
- 14 Pune 4.28
- 15 Jaipur 4.28
- 16 Mumbai 4.22

17	Coimbatore	4.17
18	Goa	4.16
19	Kochi	4.14
20	Vizag	4.13

The city of New Delhi has the highest number of restaurants . Ghaziabad has the lowest number of rating .