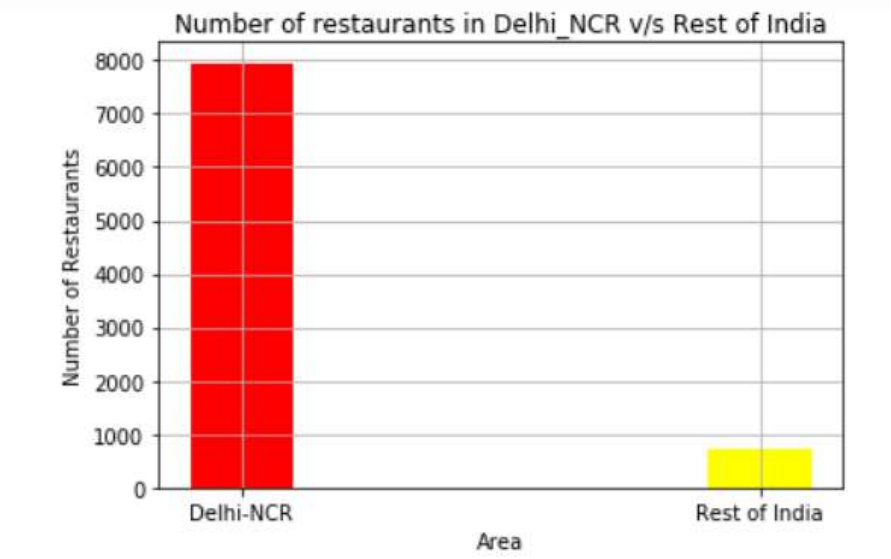
Zomato Project- Utkarsh Maheshwari

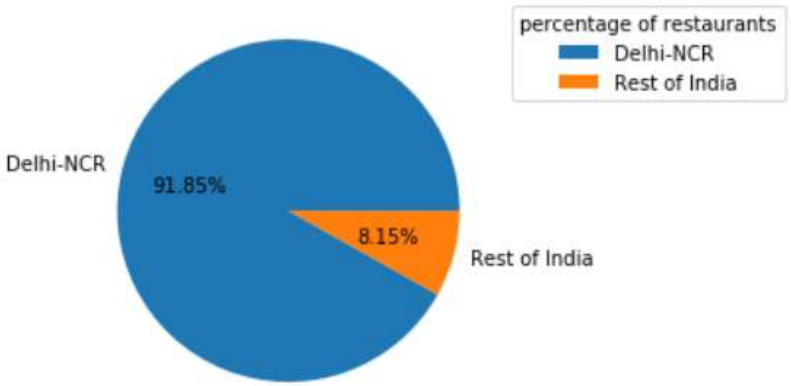
Question 1) The dataset is highly skewed toward the cities included in Delhi-NCR. So, we will summarise all the other cities in Rest of India while those in New Delhi, Ghaziabad, Noida, Gurgaon, Faridabad to Delhi-NCR. Doing this would make our analysis turn toward Delhi-NCR v Rest of India.

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

Delhi-NCR=7947

Rest of India =705





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

Cuisines available in rest of India but not in Delhi-NCR due to lack of data:
German
Cajun
BBQ
Malwani

Cusinies Not actually present in delhi NCR

German
Cajun

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

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top 10 cuisines served by restaurants in delhi-NCR are
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 served by restaurants in ret of India are
North Indian 349
Chinese 242
Continental 177
Italian 147
Cafe 136
Fast Food 97
South Indian 62
Mughlai 59
Desserts 55
Mexican 50
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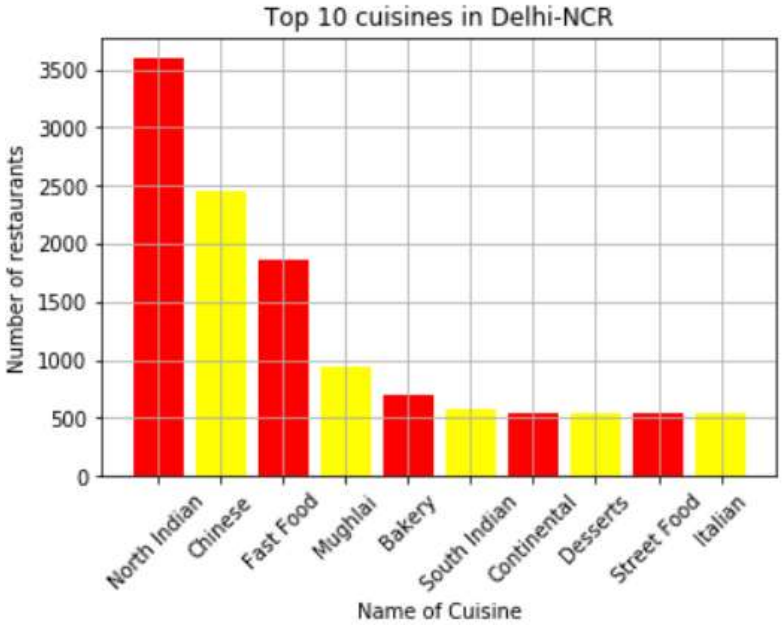
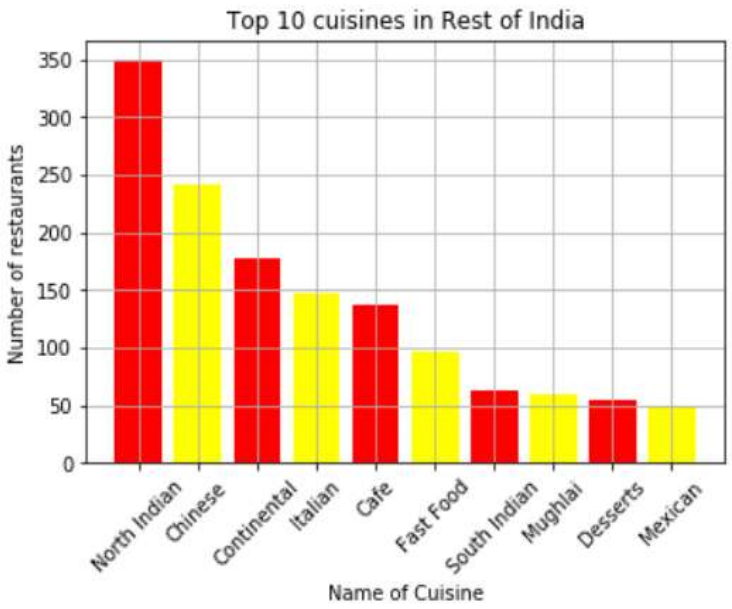
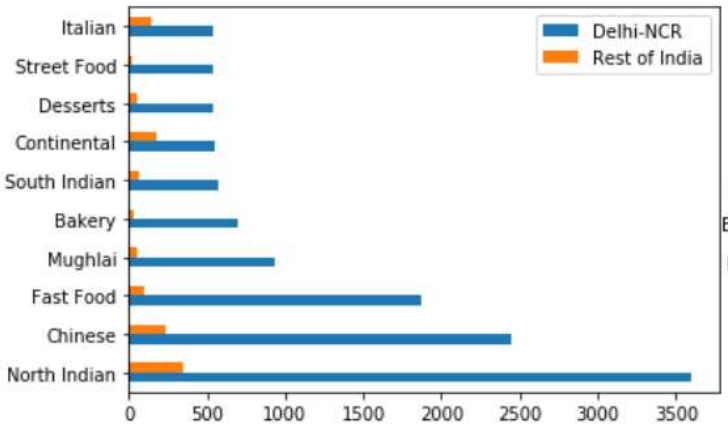
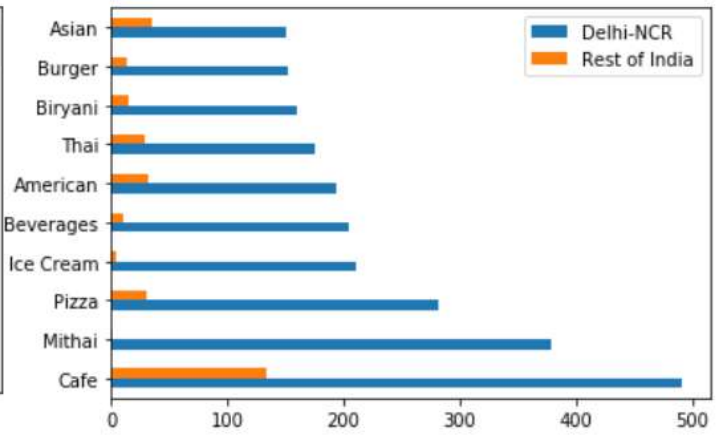


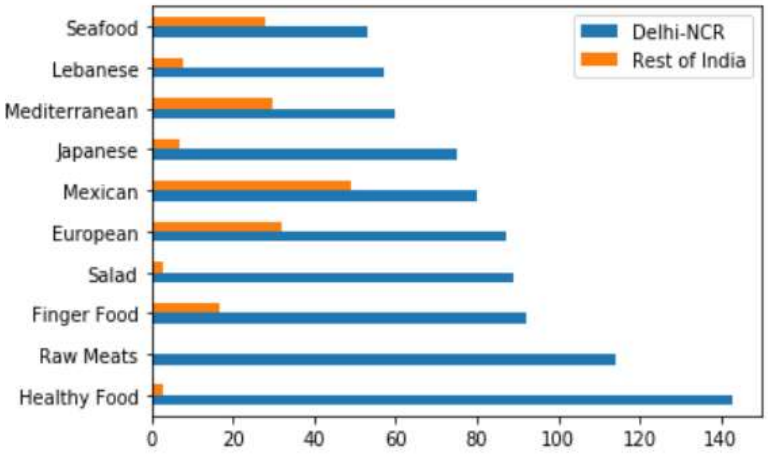


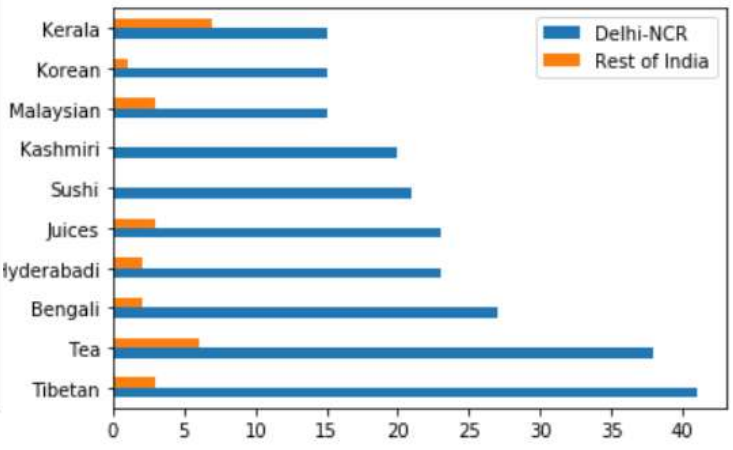
Write a short detailed analysis of how cuisine served is different from Delhi NCR to Rest of India. Plot the suitable graph to explain your inference.

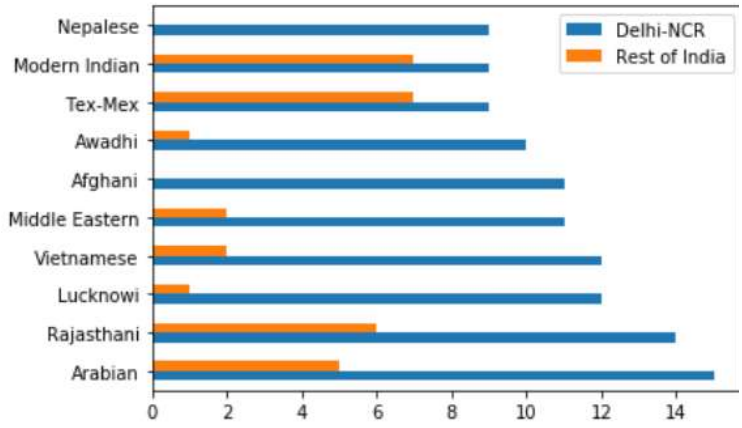
1. Cuisines present in rest of India but not in Delhi-NCR-German, Cajuan, BBQ, Malwani
2. North Indian and Chinese are top served cuisines in both Indian and delhi-NCR
3. More variety of cuisine are present in Delhi-NCR as compared to rest of India like Deli ,Iranian ,Sri Lankan ,Sushi ,Kashmiri ,Belgian ,Assamese ,Raw Meats ,Cuisine Varies ,Bihari ,South American ,Turkish ,Afghani ,Persian ,Oriya ,Drinks Only ,Moroccan ,Nepalese ,Pakistani

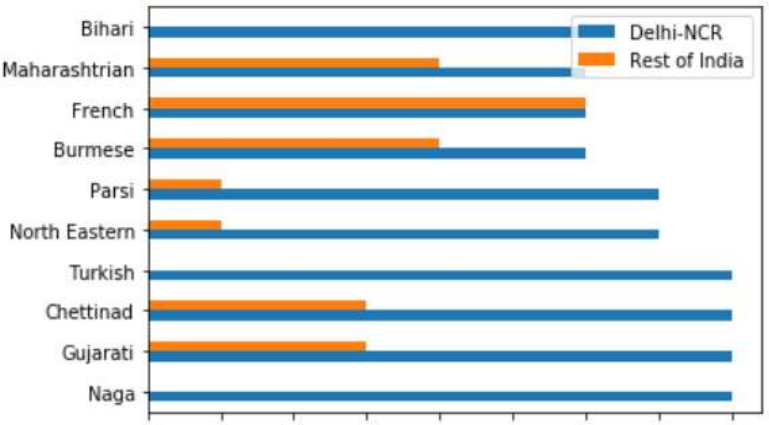

Italian
Street Food
Desserts
Continental
South Indian
Bakery
Mughlai
Fast Food
Chinese
North Indian
Delhi-NCR
Rest of India
0
500
1000
1500
2000
2500
3000
3500

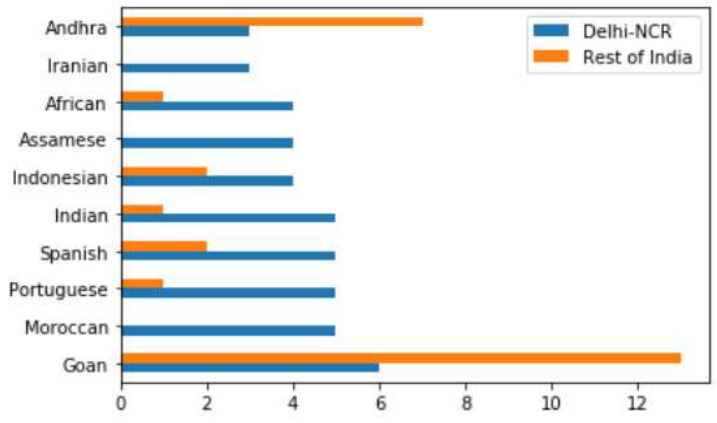

Asian
Burger
Biryani
Thai
American
Beverages
Ice Cream
Pizza
Mithai
Cafe
Delhi-NCR
Rest of India
0
100
200
300
400
500

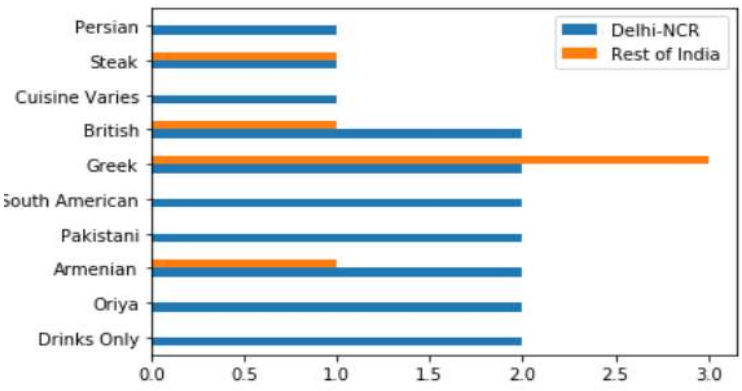

Seafood
Lebanese
Mediterranean
Japanese
Mexican
European
Salad
Finger Food
Raw Meats
Healthy Food
Delhi-NCR
Rest of India
0
20
40
60
80
100
120
140

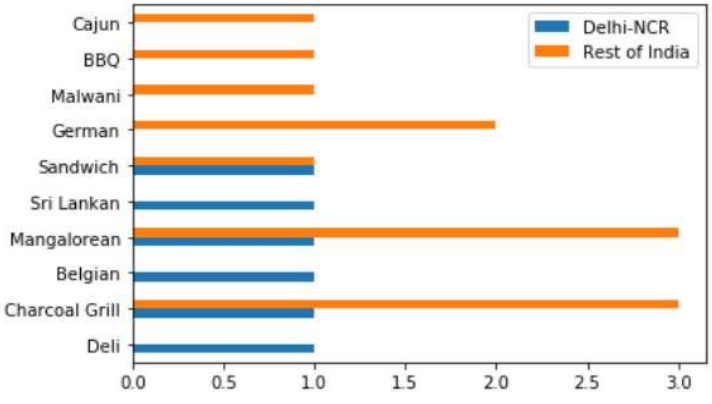

Kerala
Korean
Malaysian
Kashmiri
Sushi
Juices
lyderabadi
Bengali
Tea
Tibetan
Delhi-NCR
Rest of India
0
5
10
15
20
25
30
35
40


Nepalese
Modern Indian
Tex-Mex
Awadhi
Afghani
Middle Eastern
Vietnamese
Lucknowi
Rajasthani
Arabian
Delhi-NCR
Rest of India
0
2
4
6
8
10
12
14


Bihari
Maharashtrian
French
Burmese
Parsi
North Eastern
Turkish
Chettinad
Gujarati
Naga
Delhi-NCR
Rest of India
0
1
2
3
4
5
6
7
8

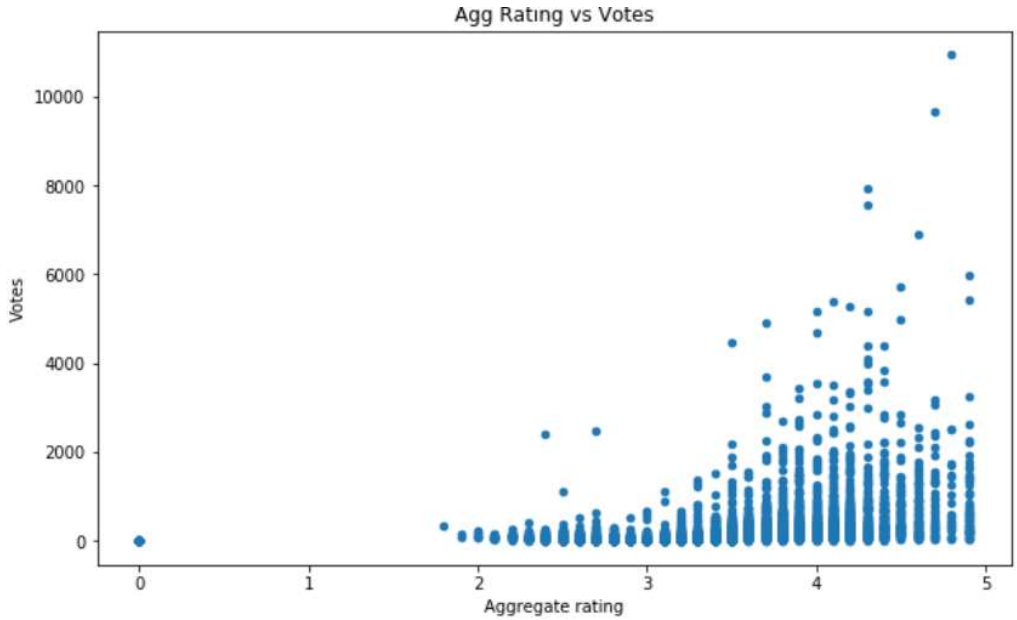

Andhra
Iranian
African
Assamese
Indonesian
Indian
Spanish
Portuguese
Moroccan
Goan
Delhi-NCR
Rest of India
0
2
4
6
8
10
12

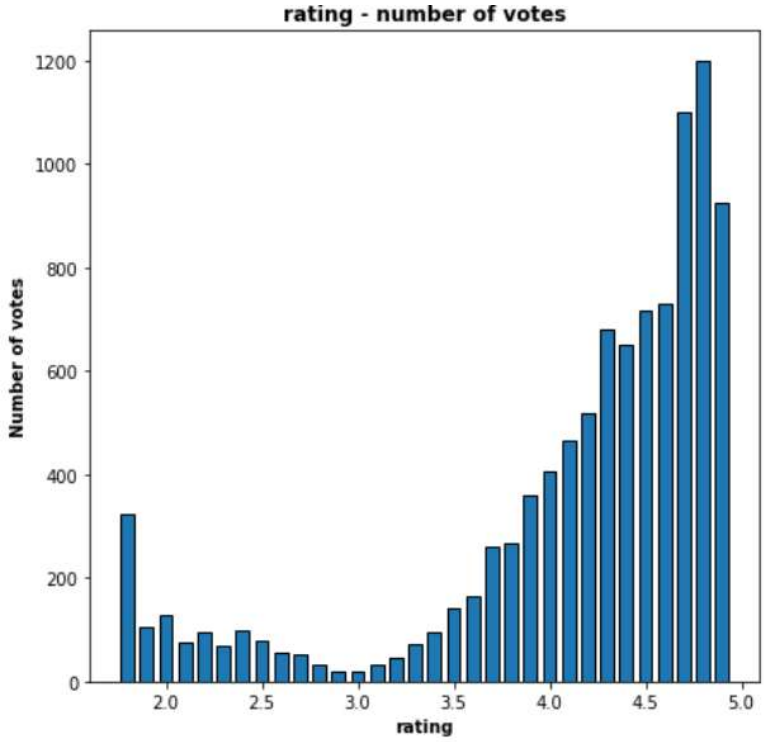

Persian
Steak
Cuisine Varies
British
Greek
South American
Pakistani
Armenian
Oriya
Drinks Only
Delhi-NCR
Rest of India
0.0
0.5
1.0
1.5
2.0
2.5
3.0


Cajun
BBQ
Malwani
German
Sandwich
Sri Lankan
Mangalorean
Belgian
Charcoal Grill
Deli
Delhi-NCR
Rest of India
0.0
0.5
1.0
1.5
2.0
2.5
3.0

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

Votes v/s rating



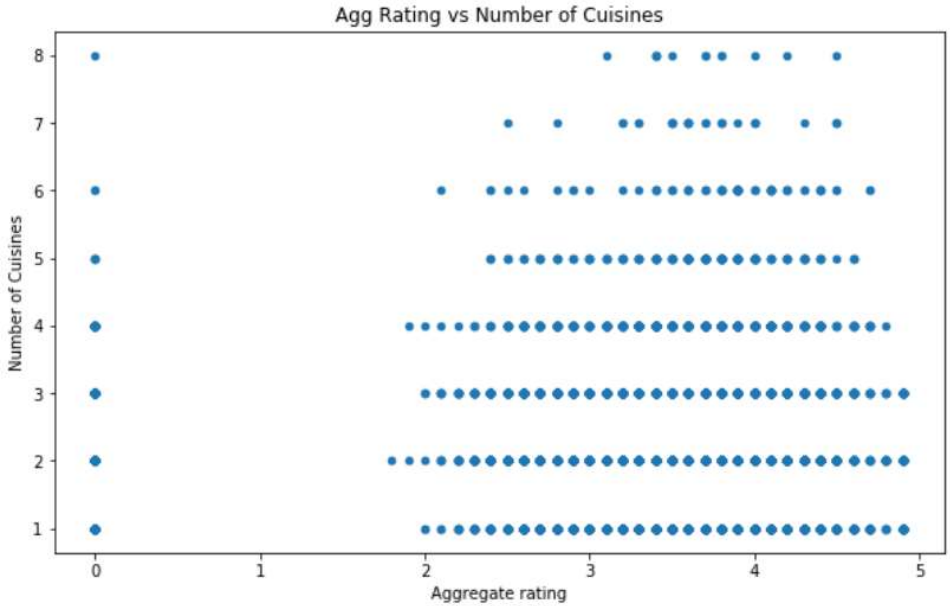


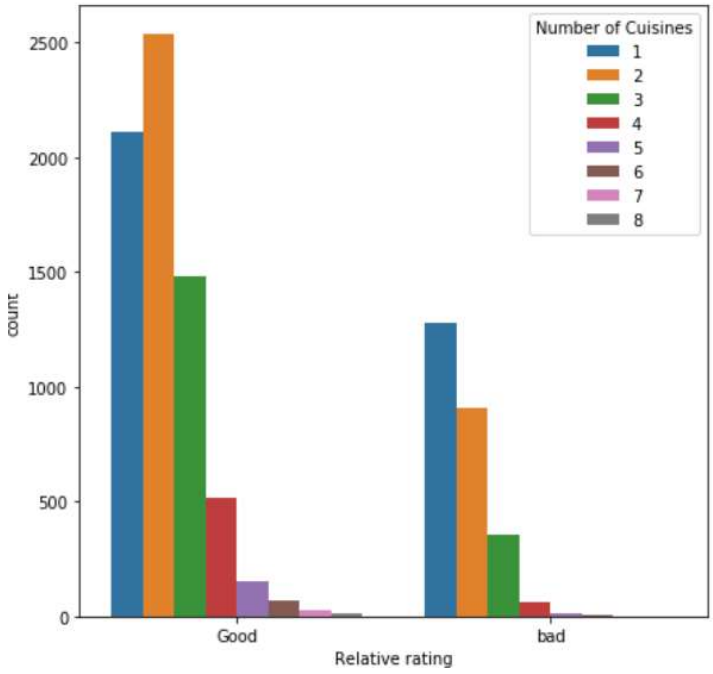
Observtions:

1. Pearson's correlation : 0.4094227523124269

2. As the number of votes increses rating also increase
3. Restaurants with less rating have less number if votes

Number of Cuisines v/s rating





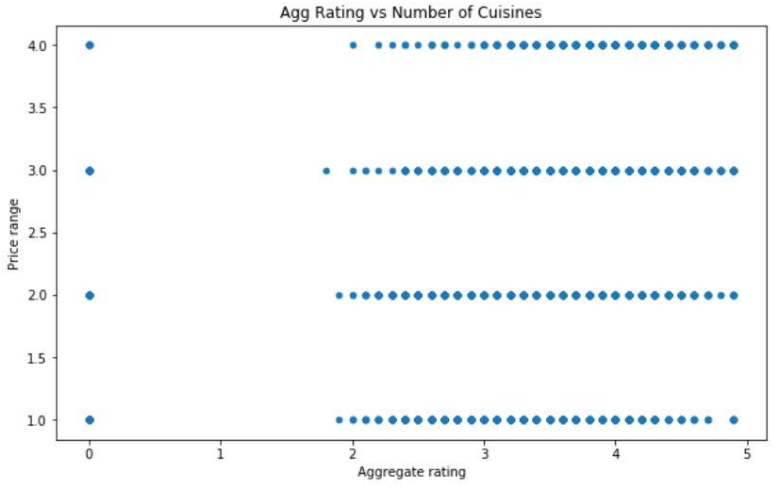
Observations:

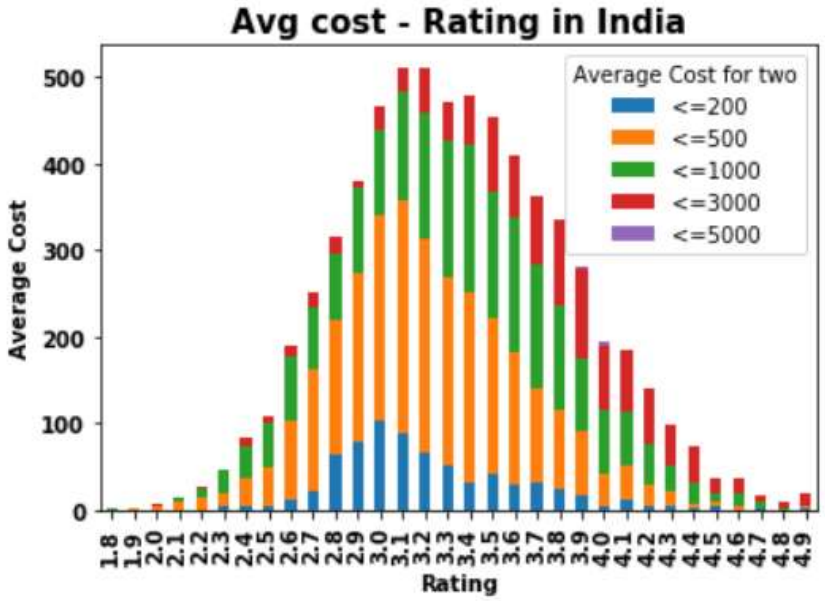
1. For restaurants serving 2 cuisines majority have good rating
2. Restaurants serving more than 4 cuisines even though are less in number but they have good rating
3. Certainly restaurants serving multiple cuisines are better that restaurants serving single cuisine.

Average Cost v/s rating

We will have to factor in currency because some currency might skew the data.

Therefore graph is drawn between rating and price range.

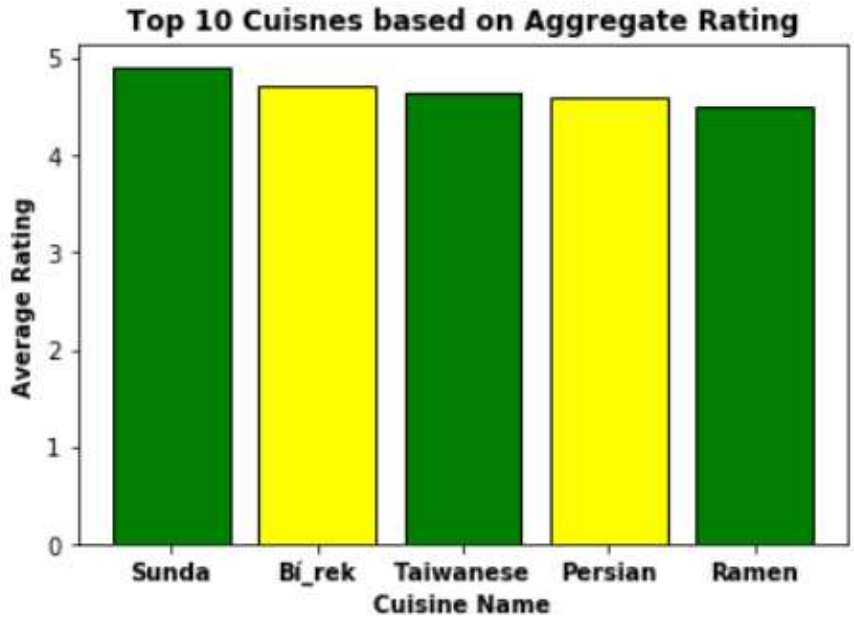


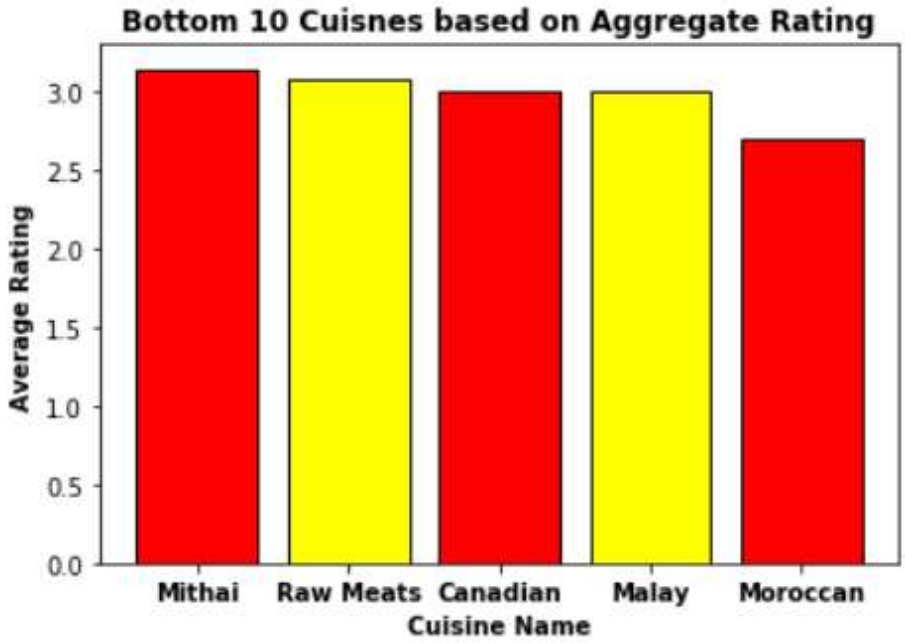


Observations:

1. Restaurants with average cost less than 200 are rated less than 4
2. Restaurants in range of 200-500 are distributed all over the rating
3. Most of the restaurants with average cost more than 3000 are rated high

Restaurant serving some specific cuisines.





Observations:

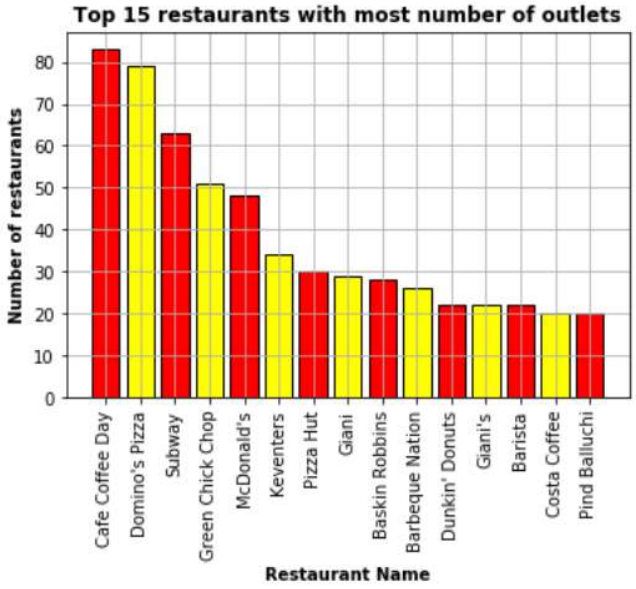
1. Restaurants serving Sunda, Bi_rek, Taiwanese, Persian, Ramen are high rated
2. Restaurants serving Mithai, Raw meats, Canadian, Malay and Mooccan are rated less.

Top 10 localities by weighted ratings

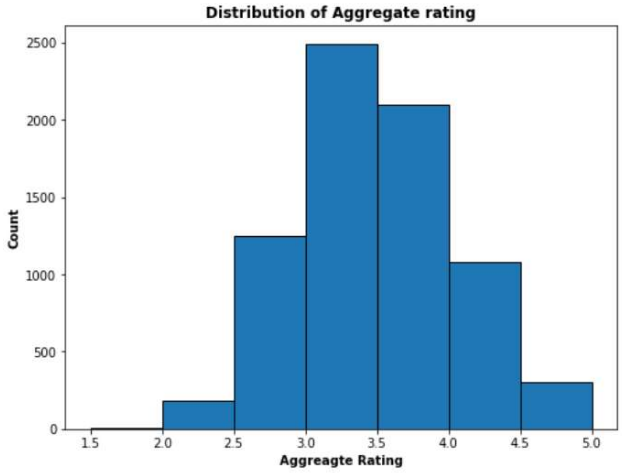
Old Dutch Hospital, Fort 4.9
The Milk District 4.9
Kenwood 4.9
Aminabad 4.9
Deira City Centre Area 4.9
Lexington Street, Soho 4.9
Venetian Village, Al Maqtaa 4.9
DIFC 4.9
Paia 4.9
City and Suburban 4.9

Visualisation

Top 15 restaurants by number of outlets:

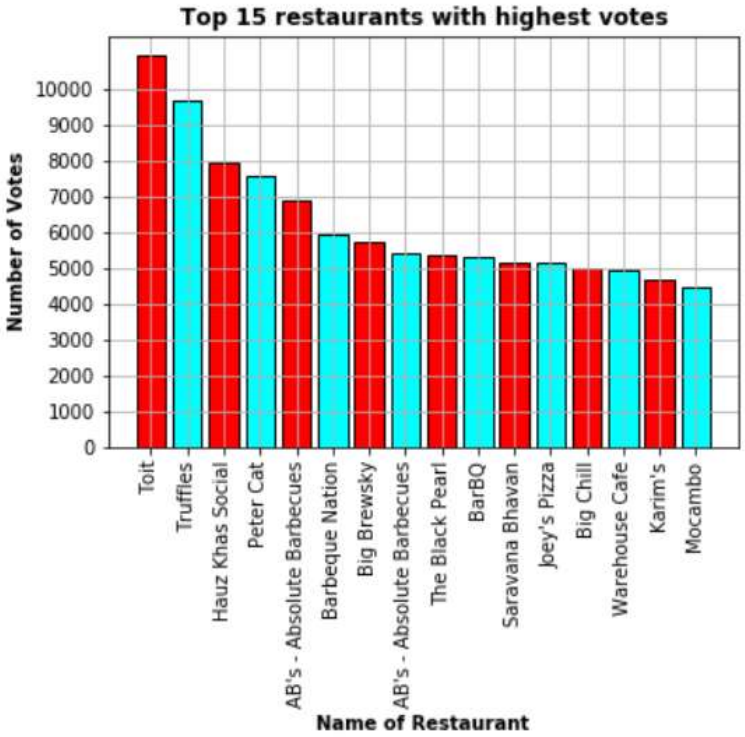


Plot the histogram of aggregate rating of restaurant(drop the unrated restaurant

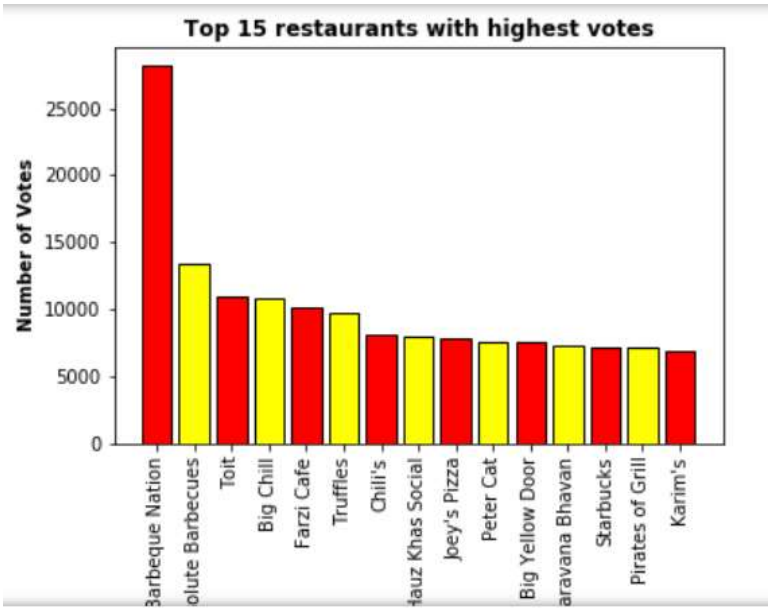


Plot the bar graph top 10 restaurants in the data with the highest number of votes

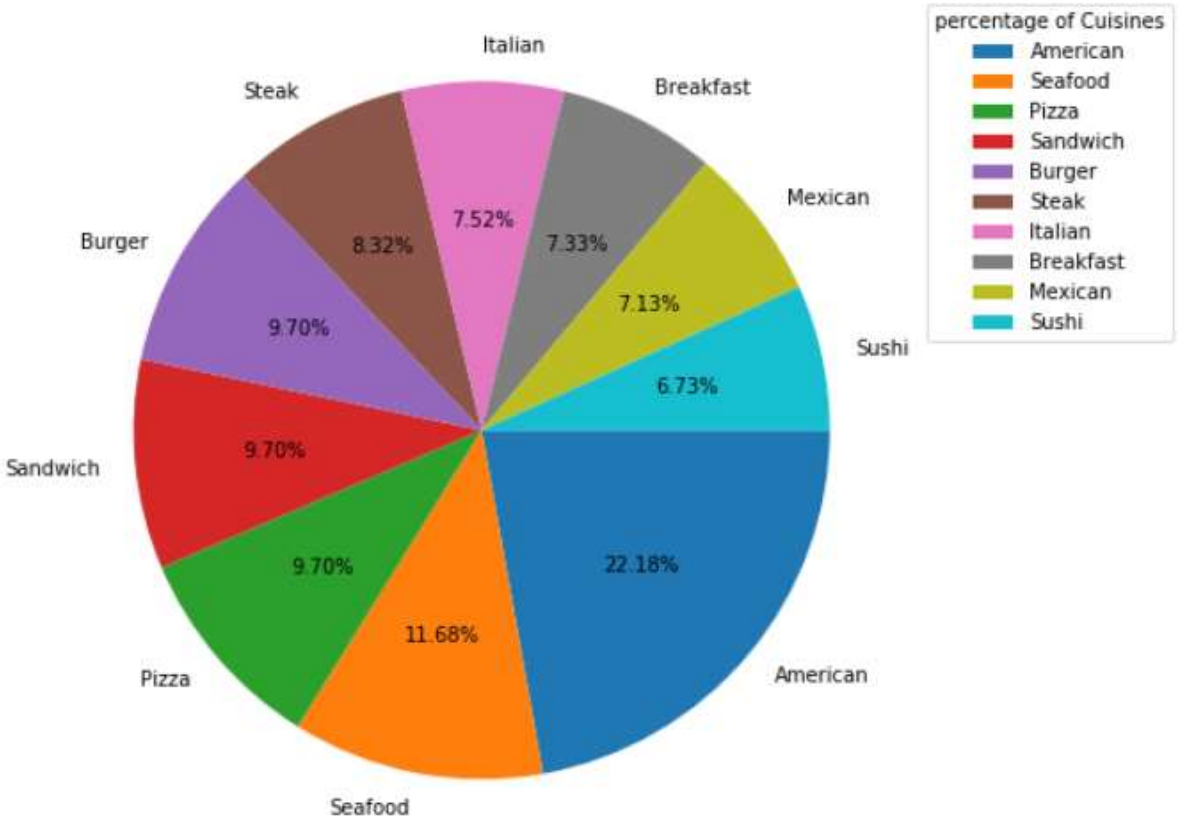
Case-1: considering different outlets of same chain as different restaurants



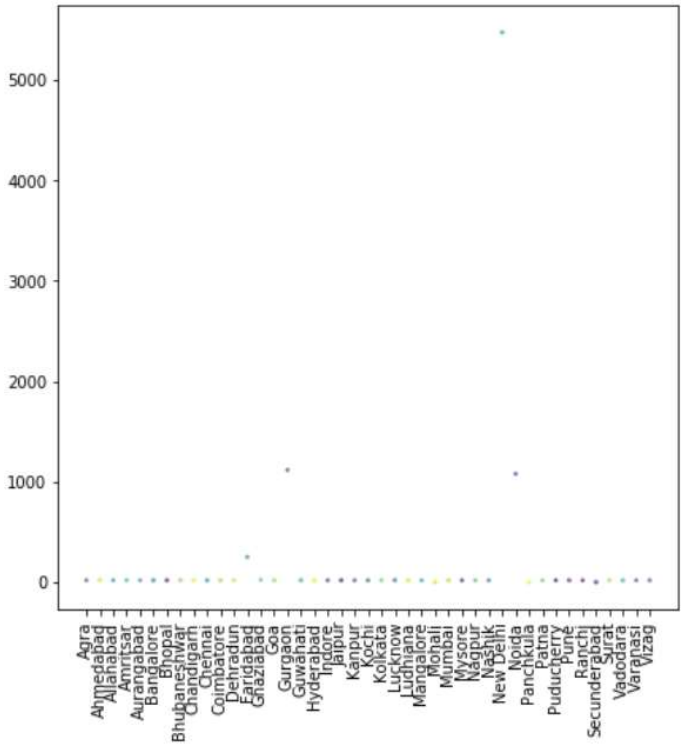
Case 2:combining total votes of all outlets of restaurants



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



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.



Case 1:multiplying size by 100 for visible difference