

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
df = pd.read_excel("Data_set.xlsx")
```

```
df
```

	Restaurant ID	Restaurant Name	Country Code
City \			
0	6317637	Le Petit Souffle	162
Makati City			
1	6304287	Izakaya Kikufuji	162
Makati City			
2	6300002	Heat - Edsa Shangri-La	162
Mandaluyong City			
3	6318506	Ooma	162
Mandaluyong City			
4	6314302	Sambo Kojin	162
Mandaluyong City			
...
...			
9546	5915730	Naml \ Gurme	208
00istanbul			
9547	5908749	Ceviz A00ac \	208
00istanbul			
9548	5915807	Huqqa	208
00istanbul			
9549	5916112	A000k Kahve	208
00istanbul			
9550	5927402	Walter's Coffee Roastery	208
00istanbul			

	Address \
0	Third Floor, Century City Mall, Kalayaan Avenu...
1	Little Tokyo, 2277 Chino Roces Avenue, Legaspi...
2	Edsa Shangri-La, 1 Garden Way, Ortigas, Mandal...
3	Third Floor, Mega Fashion Hall, SM Megamall, O...
4	Third Floor, Mega Atrium, SM Megamall, Ortigas...
...	...
9546	Kemanke00 Karamustafa Pa00a Mahallesi, R\ht\m ...
9547	Ko00uyolu Mahallesi, Muhittin 00st0.nda00 Cadd...
9548	Kuru0_e00me Mahallesi, Muallim Naci Caddesi, N...
9549	Kuru0_e00me Mahallesi, Muallim Naci Caddesi, N...
9550	Cafea00a Mahallesi, Bademalt\ Sokak, No 21/B, ...

	Locality \
0	Century City Mall, Poblacion, Makati City
1	Little Tokyo, Legaspi Village, Makati City

2	Edsa Shangri-La, Ortigas, Mandaluyong City
3	SM Megamall, Ortigas, Mandaluyong City
4	SM Megamall, Ortigas, Mandaluyong City

...	...
9546	Karaköy
9547	Koşuyolu
9548	Kuruçeşme
9549	Kuruçeşme
9550	Moda

	Locality Verbose	Longitude \
0	Century City Mall, Poblacion, Makati City, Mak...	121.027535
1	Little Tokyo, Legaspi Village, Makati City, Ma...	121.014101
2	Edsa Shangri-La, Ortigas, Mandaluyong City, Ma...	121.056831
3	SM Megamall, Ortigas, Mandaluyong City, Mandal...	121.056475
4	SM Megamall, Ortigas, Mandaluyong City, Mandal...	121.057508

...
9546	Karaköy, İstanbul	28.977392
9547	Koşuyolu, İstanbul	29.041297
9548	Kuruçeşme, İstanbul	29.034640
9549	Kuruçeşme, İstanbul	29.036019
9550	Moda, İstanbul	29.026016

	Latitude	Cuisines ...	
Currency \			
0	14.565443	French, Japanese, Desserts ...	Botswana
Pula(P)			
1	14.553708	Japanese ...	Botswana
Pula(P)			
2	14.581404	Seafood, Asian, Filipino, Indian ...	Botswana
Pula(P)			
3	14.585318	Japanese, Sushi ...	Botswana
Pula(P)			
4	14.584450	Japanese, Korean ...	Botswana
Pula(P)			

...
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..			
9546	41.022793	Turkish ...	Turkish
Lira(TL)			
9547	41.009847	World Cuisine, Patisserie, Cafe ...	Turkish
Lira(TL)			
9548	41.055817	Italian, World Cuisine ...	Turkish
Lira(TL)			
9549	41.057979	Restaurant Cafe ...	Turkish
Lira(TL)			
9550	40.984776	Cafe ...	Turkish
Lira(TL)			

	Has Table booking	Has Online delivery	Is delivering now \
0	Yes	No	No

1	Yes	No	No
2	Yes	No	No
3	No	No	No
4	Yes	No	No
...
9546	No	No	No
9547	No	No	No
9548	No	No	No
9549	No	No	No
9550	No	No	No

	Switch to order menu	Price range	Aggregate rating	Rating color
\				
0	No	3	4.8	Dark Green
1	No	3	4.5	Dark Green
2	No	4	4.4	Green
3	No	4	4.9	Dark Green
4	No	4	4.8	Dark Green
...
9546	No	3	4.1	Green
9547	No	3	4.2	Green
9548	No	4	3.7	Yellow
9549	No	4	4.0	Green
9550	No	2	4.0	Green

	Rating text	Votes
0	Excellent	314
1	Excellent	591
2	Very Good	270
3	Excellent	365
4	Excellent	229
...
9546	Very Good	788
9547	Very Good	1034
9548	Good	661
9549	Very Good	901
9550	Very Good	591

[9551 rows x 21 columns]	
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```

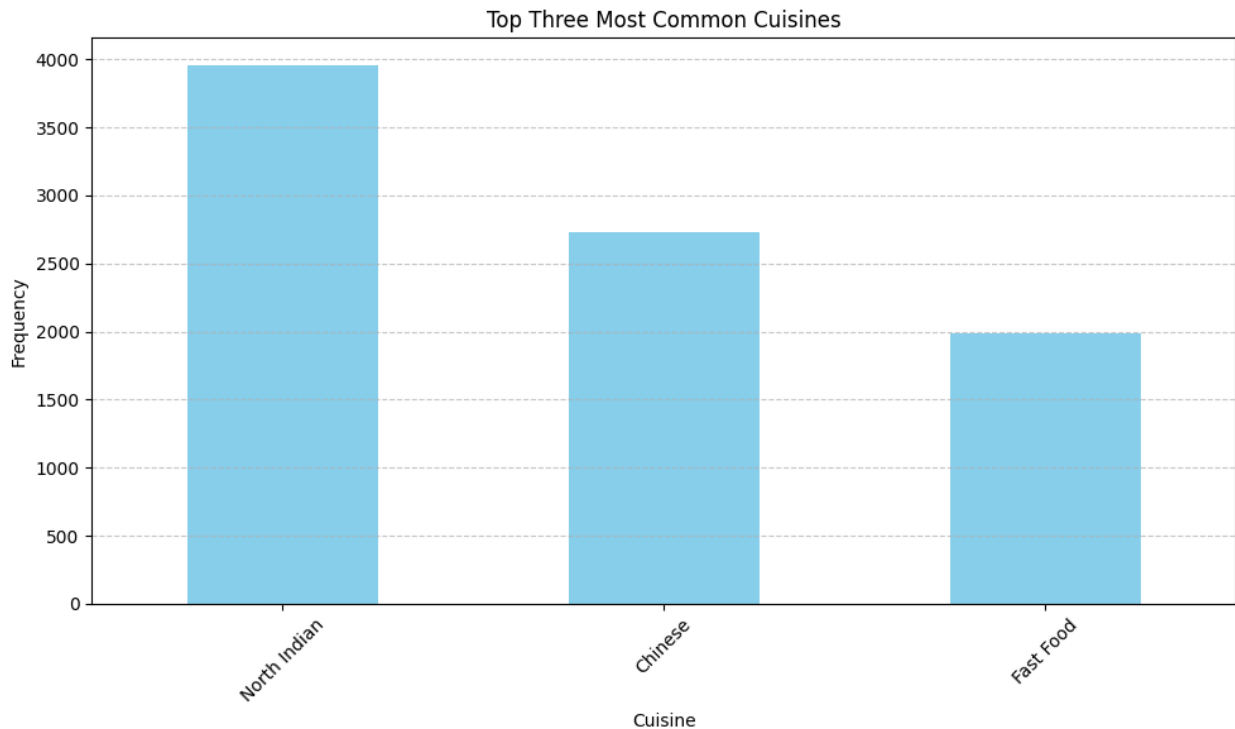
df.columns
Index(['Restaurant ID', 'Restaurant Name', 'Country Code', 'City',
      'Address',
      'Locality', 'Locality Verbose', 'Longitude', 'Latitude',
      'Cuisines',
      'Average Cost for two', 'Currency', 'Has Table booking',
      'Has Online delivery', 'Is delivering now', 'Switch to order
menu',
      'Price range', 'Aggregate rating', 'Rating color', 'Rating
text',
      'Votes'],
      dtype='object')

all_cuisines = df['Cuisines'].str.split(', ').explode()
top_cuisines = all_cuisines.value_counts().head(3)
print("Top three most common cuisines:")
Top three most common cuisines:
print(top_cuisines)

Cuisines
North Indian    3960
Chinese         2735
Fast Food       1986
Name: count, dtype: int64

plt.figure(figsize=(10, 6))
top_cuisines.plot(kind='bar', color='skyblue')
plt.title('Top Three Most Common Cuisines')
plt.xlabel('Cuisine')
plt.ylabel('Frequency')
plt.xticks(rotation=45)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.tight_layout()
plt.show()

```

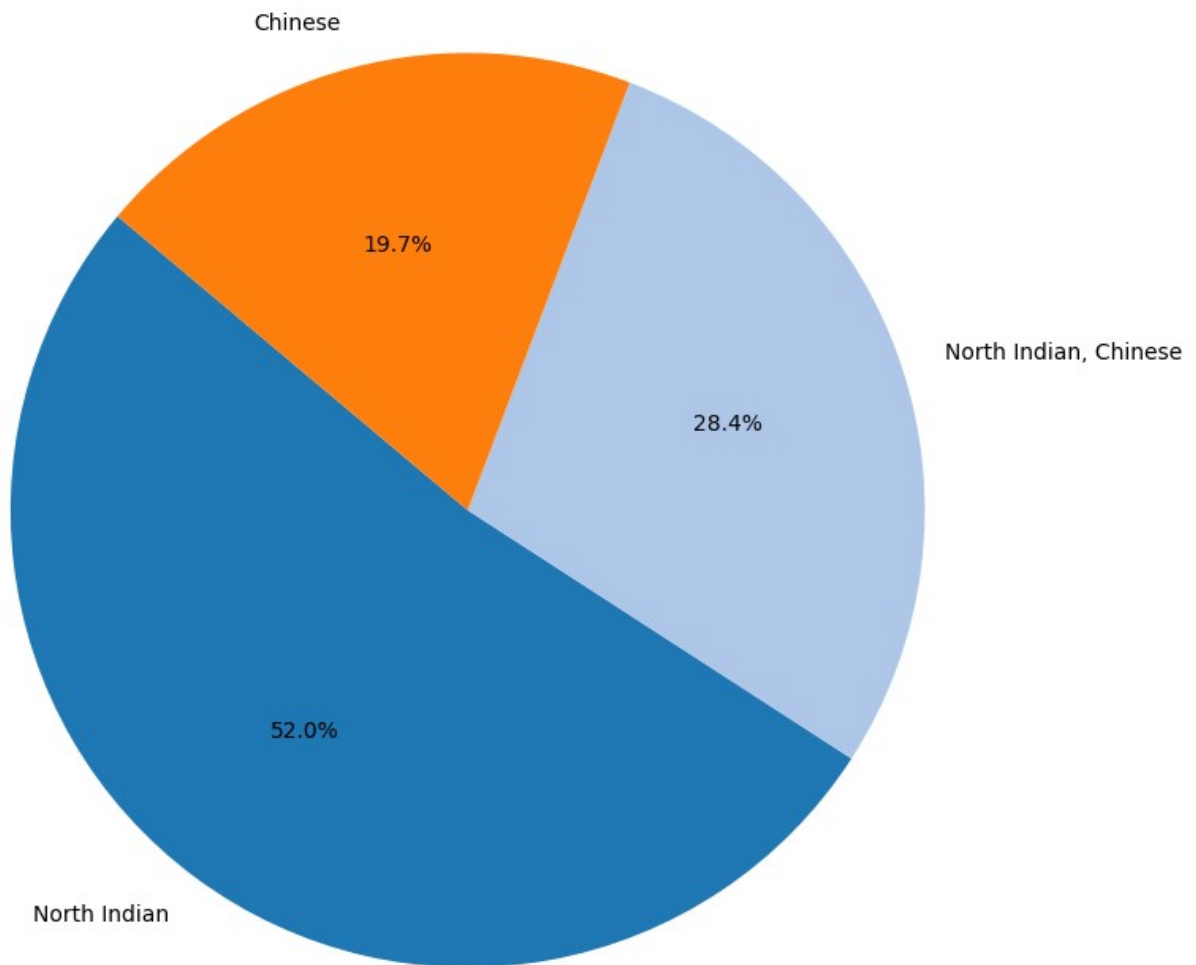


```
df.columns
Index(['Restaurant ID', 'Restaurant Name', 'Country Code', 'City',
      'Address',
      'Locality', 'Locality Verbose', 'Longitude', 'Latitude',
      'Cuisines',
      'Average Cost for two', 'Currency', 'Has Table booking',
      'Has Online delivery', 'Is delivering now', 'Switch to order
menu',
      'Price range', 'Aggregate rating', 'Rating color', 'Rating
text',
      'Votes'],
      dtype='object')

top_cuisines = df['Cuisines'].value_counts().head(3)
total_restaurants = len(df)
percentage = (top_cuisines / total_restaurants) * 100

plt.figure(figsize=(8, 8))
percentage.plot(kind='pie', autopct='%1.1f%%', startangle=140,
               colors=plt.cm.tab20.colors)
plt.title('Percentage of Restaurants Serving Top Cuisines')
plt.ylabel('')
plt.axis('equal')
plt.tight_layout()
plt.show()
```

Percentage of Restaurants Serving Top Cuisines

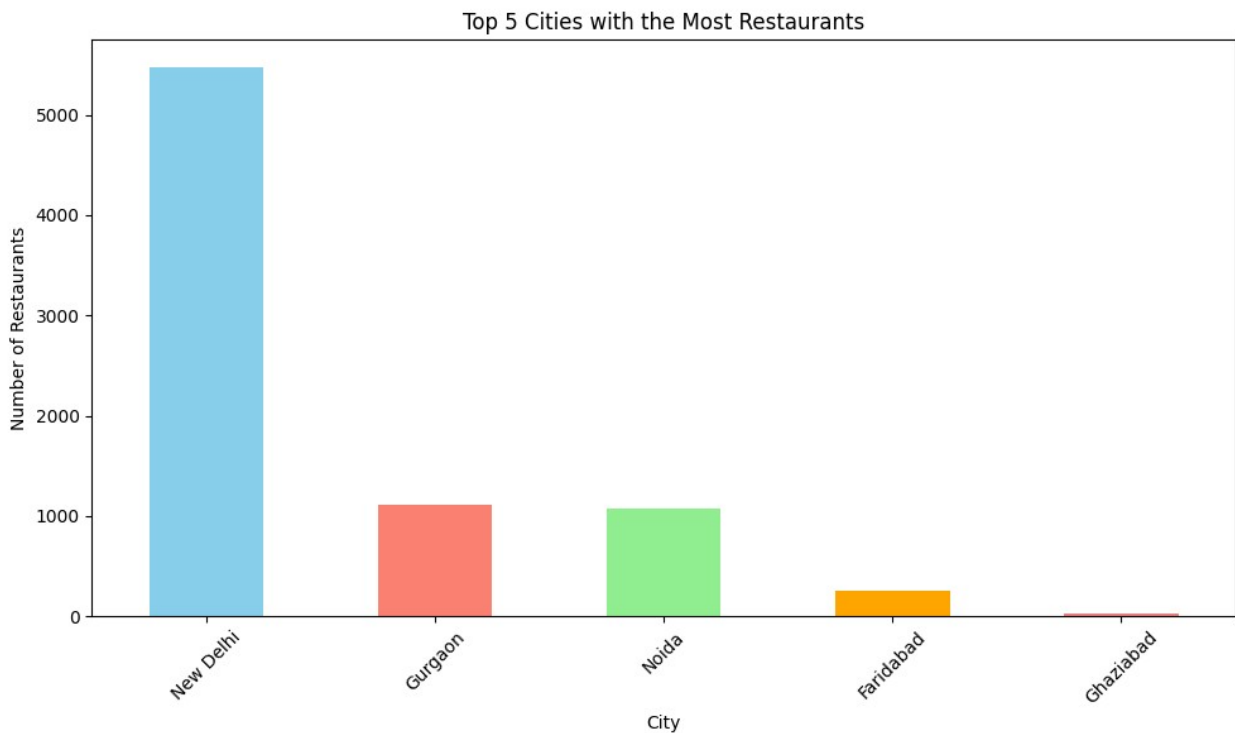


Level 1

Task 2

```
city_restaurant_counts = df['City'].value_counts().head(5)
colors = ['skyblue', 'salmon', 'lightgreen', 'orange', 'lightcoral']
plt.figure(figsize=(10, 6))
city_restaurant_counts.plot(kind='bar', color=colors)
plt.title('Top 5 Cities with the Most Restaurants')
plt.xlabel('City')
plt.ylabel('Number of Restaurants')
```

```
plt.xticks(rotation=45)
plt.tight_layout()
plt.show()
```



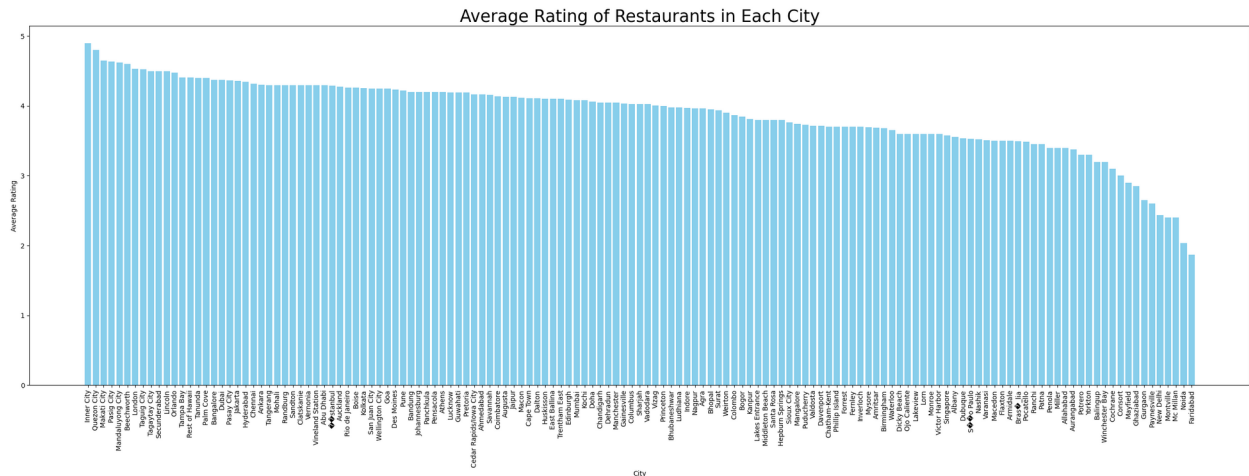
```
city_with_most_restaurants = city_restaurant_counts.idxmax()
print("City with the highest number of restaurants:",
city_with_most_restaurants)
```

City with the highest number of restaurants: New Delhi

```
average_ratings = df.groupby('City')['Aggregate
rating'].mean().reset_index()
```

```
average_ratings = average_ratings.sort_values(by='Aggregate rating',
ascending=False)
```

```
plt.figure(figsize=(26, 10))
plt.bar(average_ratings['City'], average_ratings['Aggregate rating'],
color='skyblue')
plt.xlabel('City')
plt.ylabel('Average Rating')
plt.title('Average Rating of Restaurants in Each City', fontsize=25)
plt.xticks(rotation=90)
plt.tight_layout()
plt.show()
```



```
# Calculate average rating for each city
average_ratings = df.groupby('City')['Aggregate
rating'].mean().reset_index()

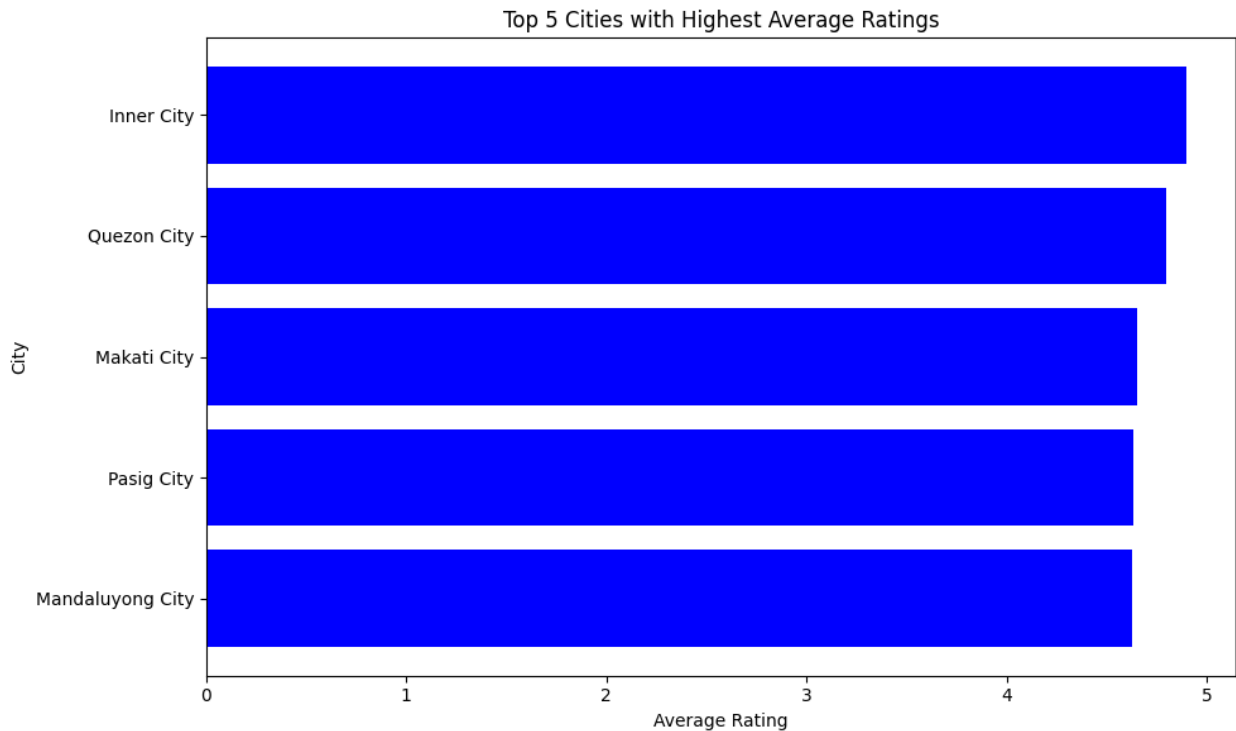
# Find the city with the highest average rating
city_with_highest_rating =
average_ratings.loc[average_ratings['Aggregate rating'].idxmax()]

print("City with the highest average rating:",
city_with_highest_rating['City'])

City with the highest average rating: Inner City

top_5_cities = average_ratings.sort_values(by='Aggregate rating',
ascending=False).head(5)

plt.figure(figsize=(10, 6))
plt.barh(top_5_cities['City'], top_5_cities['Aggregate rating'],
color='blue')
plt.title('Top 5 Cities with Highest Average Ratings')
plt.xlabel('Average Rating')
plt.ylabel('City')
plt.gca().invert_yaxis() # Invert y-axis to display the city with the
highest rating at the top
plt.tight_layout()
plt.show()
```

Task 3

Task: Price Range Distribution

```
price_ranges_counts = df['Price range'].value_counts()
plt.figure(figsize=(8, 6))
price_ranges_counts.plot(kind='bar', color='purple')
plt.title('Distribution of Price Ranges Among Restaurants')
plt.xlabel('Price Range')
plt.ylabel('Count')
plt.xticks(rotation=0)
plt.show()
```



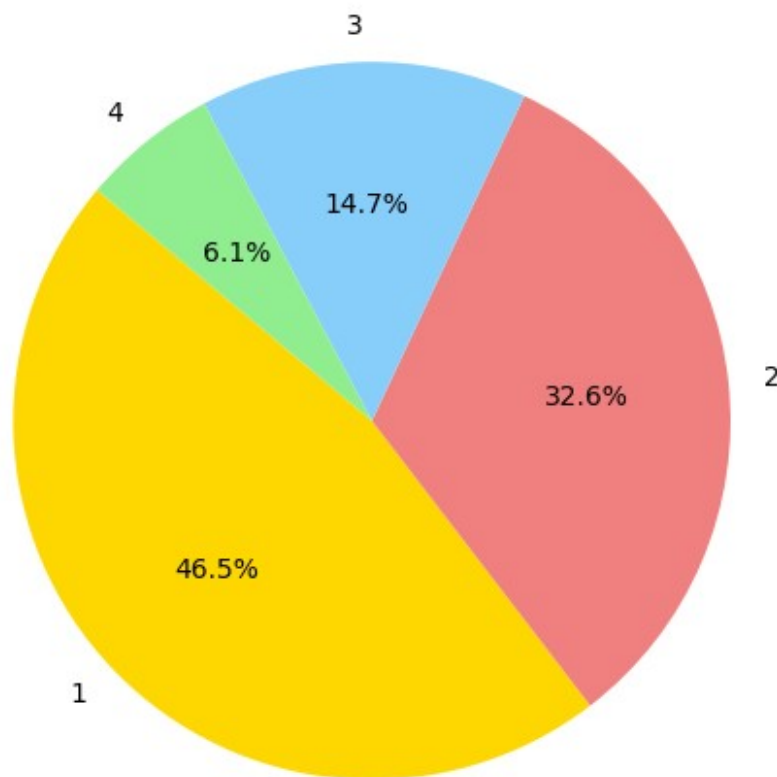
```
price_range_counts = df['Price range'].value_counts()
total_restaurants = len(df)
percentage_by_price_range = (price_range_counts / total_restaurants) *
100
print("Percentage of restaurants in each price range category:")
Percentage of restaurants in each price range category:
print(percentages_by_price_range)
Price range
1    46.529159
2    32.593446
3    14.741912
4     6.135483
Name: count, dtype: float64
labels = percentages_by_price_range.index
```

```

sizes = percentage_by_price_range.values
colors = ['gold', 'lightcoral', 'lightskyblue', 'lightgreen']
plt.figure(figsize=(8, 6))
plt.pie(sizes, labels=labels, colors=colors, autopct='%1.1f%%',
startangle=140)
plt.title('Percentage of Restaurants in Each Price Range Category')
Text(0.5, 1.0, 'Percentage of Restaurants in Each Price Range
Category')

```

Percentage of Restaurants in Each Price Range Category



Task 4

Task: Online Delivery

```

import pandas as pd
import matplotlib.pyplot as plt

df = pd.read_excel("Data_set.xlsx")

```

```

# Count the number of restaurants that offer online delivery
online_delivery_counts = df['Has Online delivery'].value_counts()

# Calculate the percentage of restaurants that offer online delivery
percentage_online_delivery = (online_delivery_counts['Yes'] / len(df))
* 100

print("Percentage of restaurants that offer online delivery:",
percentage_online_delivery)

Percentage of restaurants that offer online delivery:
25.662234321013504

# Filter the DataFrame for restaurants with online delivery
with_online_delivery = df[df['Has Online delivery'] == 'Yes']

# Filter the DataFrame for restaurants without online delivery
without_online_delivery = df[df['Has Online delivery'] == 'No']

# Calculate the average ratings for restaurants with and without
online delivery
avg_rating_with_delivery = with_online_delivery['Aggregate
rating'].mean()
avg_rating_without_delivery = without_online_delivery['Aggregate
rating'].mean()

print("Average rating of restaurants with online delivery:",
avg_rating_with_delivery)
print("Average rating of restaurants without online delivery:",
avg_rating_without_delivery)

Average rating of restaurants with online delivery: 3.2488372093023257
Average rating of restaurants without online delivery:
2.465295774647887

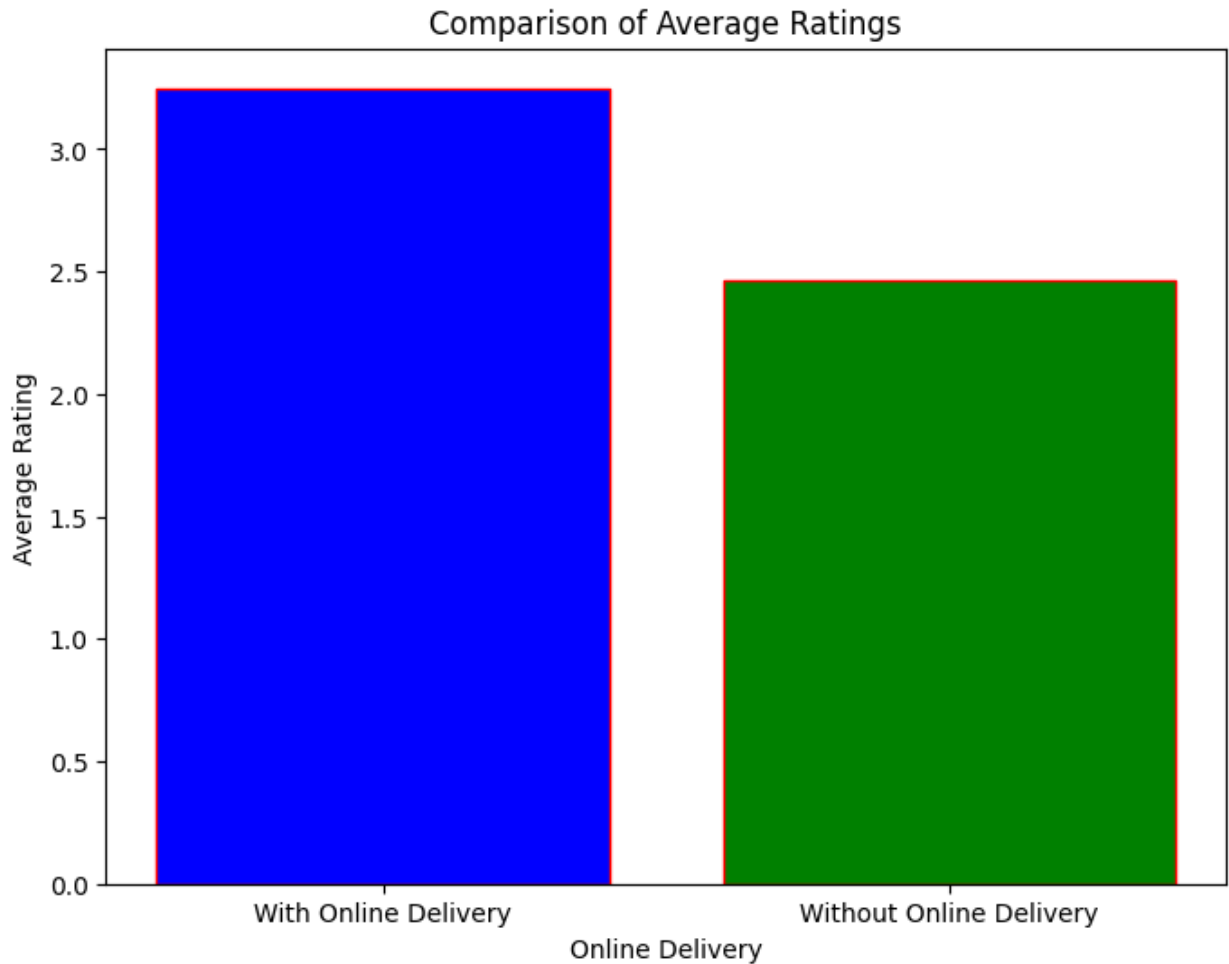
# Define the data for the bar chart
categories = ['With Online Delivery', 'Without Online Delivery']
avg_ratings = [avg_rating_with_delivery, avg_rating_without_delivery]

# Create the bar chart
plt.figure(figsize=(8, 6))
plt.bar(categories, avg_ratings, color=['blue',
'green'],edgecolor='red')

# Add title and labels
plt.title('Comparison of Average Ratings')
plt.xlabel('Online Delivery')
plt.ylabel('Average Rating')

# Display the bar chart
plt.show()

```



Level 2

Task 1

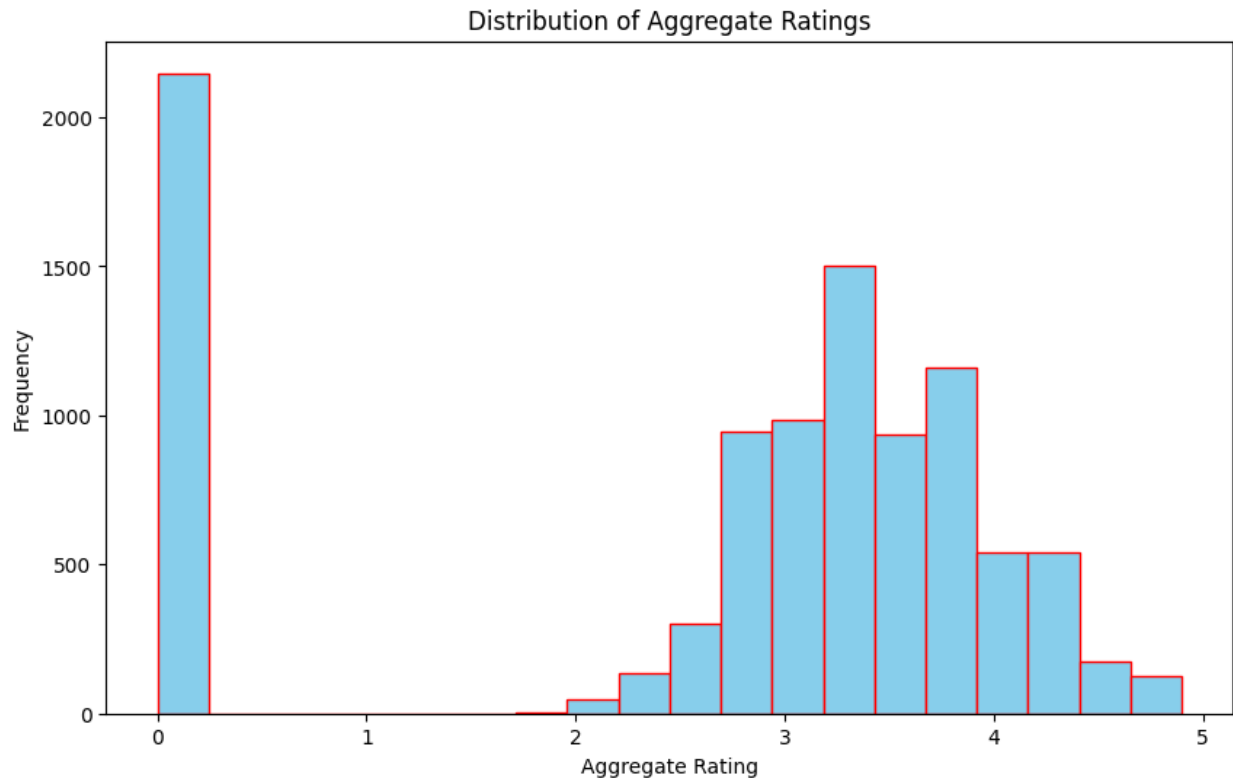
Task: Restaurant Ratings

```
colors = ['gold', 'lightcoral', 'lightskyblue', 'lightgreen']

# Plot a histogram of aggregate ratings
plt.figure(figsize=(10, 6))
plt.hist(df['Aggregate rating'], bins=20, color='skyblue',
         edgcolor='red')

# Add title and labels
plt.title('Distribution of Aggregate Ratings')
plt.xlabel('Aggregate Rating')
plt.ylabel('Frequency')

# Display the histogram
plt.show()
```



```
# Calculate the average number of votes received by restaurants
average_votes = df['Votes'].mean()

print("Average number of votes received by restaurants:",
      average_votes)

Average number of votes received by restaurants: 156.909747670401

# Set up the figure and axes
fig, ax = plt.subplots(figsize=(10, 6))

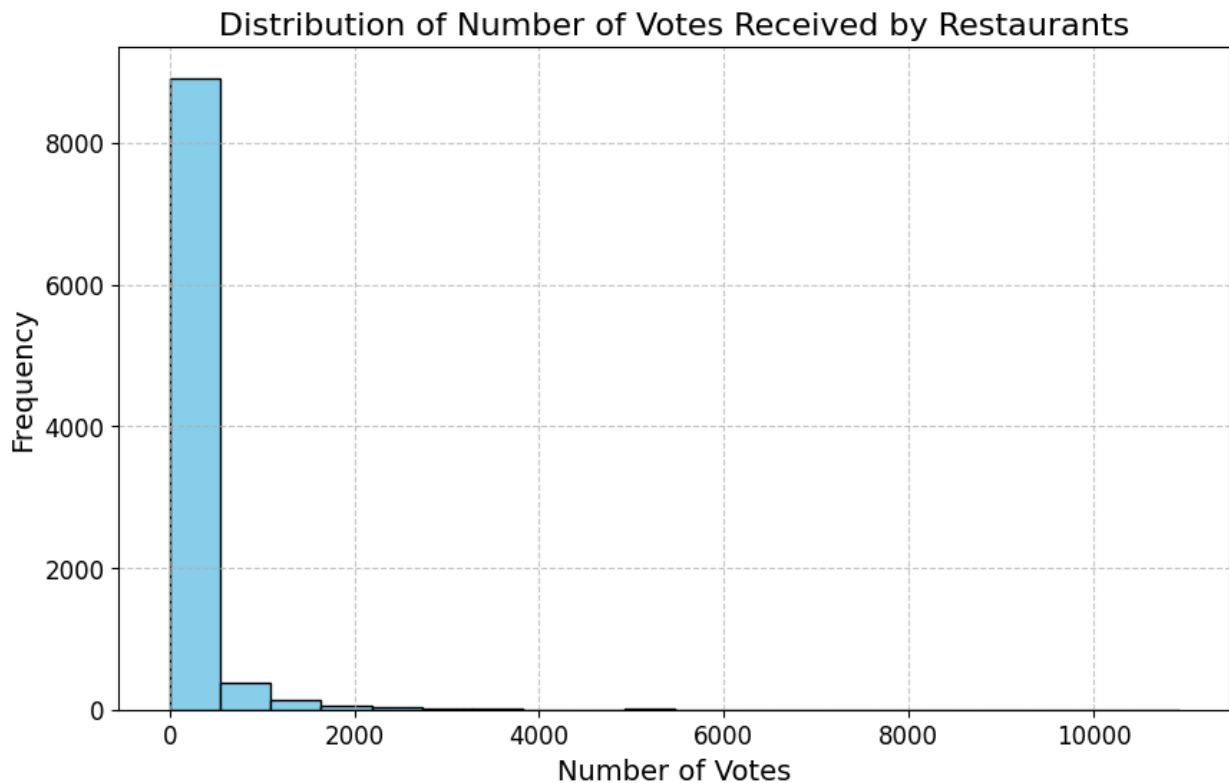
# Plot a histogram of the number of votes
ax.hist(df['Votes'], bins=20, color='skyblue', edgecolor='black')

# Add title and labels with appropriate font sizes
ax.set_title('Distribution of Number of Votes Received by
Restaurants', fontsize=16)
ax.set_xlabel('Number of Votes', fontsize=14)
ax.set_ylabel('Frequency', fontsize=14)

# Set ticks font size
ax.tick_params(axis='both', which='major', labelsize=12)

# Add grid for better readability
ax.grid(True, linestyle='--', alpha=0.7)
```

```
# Show the plot  
plt.show()
```



Task 2

Task: Cuisine Combination

```
# Drop rows with NaN values in the 'Cuisines' column  
data = df.dropna(subset=['Cuisines'])  
  
# Extract the cuisines column  
cuisines_series = data['Cuisines']  
  
# Create an empty dictionary to store combinations and their counts  
cuisine_combinations = {}  
  
# Iterate over each row and count combinations  
for cuisines in cuisines_series:  
    # Split cuisines into a list  
    cuisine_list = cuisines.split(', ')  
    # Sort the list to ensure consistent counting (e.g., "Italian,  
    Chinese" vs "Chinese, Italian")  
    cuisine_list.sort()  
    # Convert the list back to a string to use as a dictionary key  
    key = ', '.join(cuisine_list)
```

```

# Increment the count for this combination or initialize it to 1
cuisine_combinations[key] = cuisine_combinations.get(key, 0) + 1

# Sort the combinations by count in descending order
sorted_combinations = sorted(cuisine_combinations.items(), key=lambda
x: x[1], reverse=True)

# Print the most common combinations
for combination, count in sorted_combinations:
    print(combination, "-", count)

North Indian - 936
Chinese, North Indian - 616
Mughlai, North Indian - 394
Chinese - 354
Fast Food - 354
Chinese, Mughlai, North Indian - 306
Cafe - 299
Bakery - 218
Bakery, Desserts - 181
Chinese, Fast Food - 159
Street Food - 149
Fast Food, Pizza - 142
Chinese, North Indian, South Indian - 135
Mithai, Street Food - 134
Fast Food, North Indian - 120
Bakery, Fast Food - 117
South Indian - 112
Desserts, Ice Cream - 109
Chinese, Continental, North Indian - 107
Mughlai - 103
Chinese, Fast Food, North Indian - 102
Burger, Fast Food - 99
Ice Cream - 74
Mithai - 71
Bakery, Desserts, Fast Food - 69
American, Fast Food, Healthy Food, Salad - 63
Beverages, Fast Food - 59
Fast Food, North Indian, Raw Meats - 57
Italian - 54
Chinese, Thai - 54
Beverages - 54
North Indian, South Indian - 54
Biryani - 54
Pizza - 53
Desserts - 53
Finger Food - 49
Chinese, South Indian - 45
Fast Food, Raw Meats - 45
Italian, Pizza - 43

```


Fast Food, Italian, Pizza - 41
Continental, North Indian - 41
Chinese, Continental, Italian, North Indian - 37
Mexican - 36
North Indian, Street Food - 34
Chinese, Italian, North Indian - 33
Biryani, North Indian - 33
Continental, Italian, North Indian - 32
American - 31
Chinese, Fast Food, North Indian, South Indian - 31
Fast Food, Street Food - 27
Biryani, Mughlai - 25
American, Fast Food - 22
Burger, Desserts, Fast Food - 22
Continental - 21
Cafe, Tea - 21
Japanese, Sushi - 20
Asian, Chinese, Thai - 19
Cafe, Fast Food - 19
Continental, Italian - 19
Asian, Continental, North Indian - 19
Bakery, Cafe - 19
Indian - 18
Asian - 18
Chinese, Tibetan - 18
Cafe, Continental, Italian - 18
Japanese - 17
Fast Food, Italian - 17
Fast Food, North Indian, South Indian - 17
American, Burger - 16
Thai - 16
Beverages, Desserts - 16
Chinese, Mithai, North Indian, South Indian, Street Food - 16
American, Burger, Fast Food - 15
Chinese, Desserts, Fast Food, Mithai, North Indian, South Indian, Street Food - 15
Healthy Food - 15
Seafood - 14
Asian, Chinese - 14
Chinese, Continental, Mughlai, North Indian - 14
Cafe, Chinese, North Indian - 14
Mithai, North Indian, Street Food - 14
Biryani, Mughlai, North Indian - 14
Cafe, Italian - 13
Cafe, Continental - 13
Cafe, Desserts - 12
Chinese, Fast Food, Italian, North Indian - 12
Bakery, Chinese, Fast Food - 12
Mithai, North Indian, South Indian, Street Food - 12

Chinese, Japanese, Thai - 11
Bakery, Cafe, Desserts - 11
Modern Indian - 11
Chinese, North Indian, Street Food - 11
Fast Food, South Indian - 11
Desserts, Fast Food - 10
Mithai, South Indian, Street Food - 10
Mithai, North Indian - 10
Continental, Healthy Food - 10
Bengali, North Indian - 10
Chinese, Fast Food, South Indian - 10
Desserts, Street Food - 10
Chinese, Fast Food, Mughlai, North Indian - 10
Brazilian - 9
Lebanese - 9
BBQ - 9
Cafe, Chinese, Continental, Italian - 9
Chinese, Mughlai, North Indian, South Indian - 9
Fast Food, Tea - 9
Chinese, Mughlai - 9
Chinese, Fast Food, Mithai, North Indian, South Indian, Street Food - 9
Chinese, Continental, North Indian, Thai - 9
Chinese, Mithai, North Indian, South Indian - 9
Bakery, Mithai - 9
Japanese, Steak, Sushi - 8
American, Seafood, Steak - 8
European, Mediterranean, North Indian - 8
Kashmiri - 8
Healthy Food, Salad - 8
Fast Food, Mughlai, North Indian - 8
Chinese, North Indian, Thai - 8
Chinese, Street Food - 8
Beverages, Chinese, Desserts, Fast Food, Mithai, North Indian, South Indian, Street Food - 8
Finger Food, Italian, North Indian - 8
Biryani, Hyderabadi - 8
Bakery, Italian, Pizza - 8
Beverages, Fast Food, Ice Cream - 8
French - 7
Steak - 7
American, Breakfast - 7
European, North Indian - 7
Continental, European - 7
Cafe, Italian, Pizza - 7
Cafe, European - 7
Chinese, Italian, Mexican, North Indian - 7
Cafe, Chinese - 7
Cafe, Chinese, Continental, North Indian - 7

Chinese, Mithai, North Indian, Street Food - 7
Asian, Continental, Italian, North Indian - 7
Continental, European, North Indian - 7
Chinese, Finger Food, North Indian - 7
European - 7
Chinese, Italian, Mughlai, North Indian - 7
Bakery, Chinese - 7
Fast Food, Mithai - 7
Cafe, Chinese, Italian - 7
Korean - 6
Bar Food, Brazilian - 6
International - 6
Healthy Food, Juices - 6
Burger - 6
Maharashtrian - 6
American, Tex-Mex - 6
European, Italian - 6
Biryani, Chinese, Fast Food, North Indian - 6
American, Continental, Italian - 6
Mughlai, North Indian, South Indian - 6
Biryani, Hyderabadi, North Indian - 6
Tea - 6
Chinese, Seafood, Thai - 6
Fast Food, Mughlai - 6
Chinese, Continental, Fast Food, North Indian - 6
American, Steak - 5
Italian, Pizza, Sandwich - 5
Pizza, Sandwich - 5
American, Italian - 5
Asian, Thai - 5
African, Portuguese - 5
Fast Food, North Indian, Street Food - 5
American, Continental - 5
North Indian, Rajasthani - 5
Cafe, Chinese, Fast Food - 5
Chinese, Fast Food, Italian - 5
Italian, North Indian - 5
Asian, Chinese, Japanese, Thai - 5
Asian, Chinese, Japanese, Malaysian, Thai, Vietnamese - 5
Bengali - 5
Chinese, North Indian, South Indian, Street Food - 5
Beverages, Healthy Food - 5
Kerala, South Indian - 5
Cafe, Chinese, Continental - 5
Chinese, Continental - 5
Cafe, Fast Food, North Indian - 5
Kerala - 5
Chinese, Seafood - 5
North Indian, South Indian, Street Food - 5

Chinese, Fast Food, North Indian, South Indian, Street Food - 5
Chinese, Mithai - 5
Desserts, Fast Food, Ice Cream - 5
Sushi - 4
Arabian, Lebanese - 4
American, Burger, Sandwich - 4
Southern - 4
American, Italian, Pizza - 4
American, Bar Food - 4
Breakfast - 4
American, BBQ, Steak - 4
Japanese, Sushi, Thai - 4
American, Southern - 4
American, Mexican - 4
Burger, Seafood, Steak - 4
Indian, North Indian - 4
Rajasthani - 4
Continental, Italian, Mexican, North Indian - 4
Bakery, Cafe, Fast Food - 4
Asian, Mediterranean, North Indian - 4
Chinese, Italian, Mexican, North Indian, Thai - 4
Chinese, Fast Food, Mithai, North Indian, South Indian - 4
Fast Food, Mithai, North Indian, South Indian, Street Food - 4
Cafe, Continental, Italian, Mexican - 4
North Indian, Seafood - 4
Chinese, Mithai, Street Food - 4
Burger, Chinese, Fast Food - 4
Mediterranean - 4
South Indian, Street Food - 4
American, Asian, Continental, North Indian - 4
Cafe, Fast Food, Italian - 4
Awadhi, Mughlai, North Indian - 4
Finger Food, North Indian - 4
Chinese, Continental, Italian, Lebanese, Mediterranean, Thai - 4
Asian, Continental, Mughlai, North Indian - 4
Chinese, Fast Food, North Indian, Street Food - 4
Bakery, Street Food - 4
Chettinad, Chinese, North Indian, Seafood, South Indian - 4
Chinese, Continental, Mexican, North Indian - 4
Biryani, Chinese, North Indian - 4
Afghani - 4
Juices - 4
Asian, North Indian - 4
Cafe, Italian, Lebanese - 4
Cafe, Continental, Italian, North Indian - 4
Continental, Finger Food, North Indian - 4
Cafe, Chinese, Desserts, Fast Food, Italian, Tea - 4
Italian, Mediterranean - 4
Turkish - 4

Beverages, Street Food - 4
Chinese, European, Italian, North Indian - 4
Continental, Italian, Mediterranean, North Indian - 4
Continental, Fast Food, North Indian - 4
Cafe, Continental, European, Italian - 4
Cafe, Continental, Fast Food, Italian - 4
Chinese, Fast Food, Thai - 4
Cafe, Continental, North Indian - 4
Asian, Sushi - 4
Beverages, Ice Cream - 4
Kebab, Turkish Pizza - 4
Japanese, Korean - 3
Asian, European - 3
Filipino - 3
Bar Food - 3
German - 3
Bar Food, Pizza - 3
American, Breakfast, Burger - 3
Chinese, Sushi, Thai - 3
Asian, Japanese - 3
Italian, Mediterranean, Pizza - 3
American, Bar Food, Pizza - 3
American, Seafood - 3
European, Italian, Mediterranean - 3
Breakfast, Burger - 3
Spanish, Tapas - 3
Hawaiian, Seafood, Steak - 3
American, Desserts - 3
Indian, Pakistani - 3
Chinese, Continental, Italian - 3
Chinese, Continental, North Indian, South Indian - 3
Hyderabadi, North Indian - 3
Asian, European, North Indian - 3
American, Italian, Mexican - 3
Fast Food, Mexican - 3
American, Burger, Mexican, Tex-Mex - 3
Cafe, European, Italian - 3
Cafe, Continental, Fast Food - 3
Biryani, South Indian - 3
Beverages, Desserts, Ice Cream - 3
Chinese, North Indian, Raw Meats - 3
Continental, Mughlai, North Indian - 3
Beverages, Cafe - 3
Raw Meats - 3
Mughlai, North Indian, Seafood - 3
Continental, Finger Food, Italian - 3
Chinese, Mughlai, North Indian, Seafood - 3
Iranian, Parsi - 3
Bakery, Beverages, Desserts - 3

Chinese, Continental, Fast Food, Mexican - 3
Continental, Fast Food - 3
Beverages, Fast Food, Street Food - 3
Burmese, Chinese, Japanese, Malaysian, Thai - 3
Nepalese, Tibetan - 3
Lucknowi - 3
Chinese, Japanese, Thai, Tibetan - 3
Continental, Italian, Mexican - 3
Chinese, Continental, Finger Food, Italian, North Indian - 3
American, Chinese, Continental, North Indian - 3
Italian, Mexican - 3
American, Chinese, Italian, North Indian - 3
Arabian, Lebanese, Mediterranean, Middle Eastern - 3
Chinese, Japanese, Seafood - 3
Assamese, Chinese - 3
Cafe, Italian, North Indian - 3
American, European - 3
Beverages, Desserts, Fast Food - 3
Cafe, Chinese, Fast Food, Italian - 3
Asian, European, Mediterranean, North Indian - 3
Arabian, Lebanese, Moroccan - 3
Gujarati - 3
Chinese, Japanese - 3
Fast Food, Turkish - 3
Bihari - 3
Bakery, Chinese, Italian, Mexican - 3
Nepalese - 3
Naga - 3
Biryani, Kerala - 3
Asian, Fast Food, Italian, North Indian - 3
Cafe, Chinese, Italian, North Indian - 3
Chinese, Italian - 3
Biryani, Fast Food, North Indian - 3
Chinese, North Indian, Tibetan - 3
Burger, Fast Food, Pizza - 3
Continental, Fast Food, Italian - 3
North Indian, Raw Meats - 3
Chinese, Mediterranean, North Indian - 3
Indonesian, Sunda - 3
British - 3
Indian, Street Food - 3
Filipino, Mexican - 2
BBQ, Burger, Seafood - 2
American, BBQ - 2
Coffee and Tea, Sandwich - 2
Breakfast, Sandwich - 2
Asian, Japanese, Sushi - 2
Bar Food, Burger - 2
Vietnamese - 2

Modern Australian - 2
American, BBQ, Burger - 2
Asian, Vietnamese - 2
American, BBQ, Southern - 2
Desserts, Sandwich - 2
Chinese, Pizza - 2
Latin American - 2
Seafood, Sushi - 2
Desserts, Ice Cream, Pizza - 2
Cajun, Sandwich, Seafood - 2
Breakfast, Coffee and Tea - 2
Mediterranean, Seafood - 2
Tapas - 2
Latin American, Mexican, Southwestern - 2
Burger, Pizza, Sandwich - 2
Japanese, Seafood, Sushi - 2
American, Italian, Seafood - 2
Indian, Middle Eastern - 2
Indian, South Indian - 2
Chinese, Indian, North Indian - 2
Continental, Indian - 2
Burger, Cafe - 2
American, Burger, Mexican - 2
Arabian, Middle Eastern - 2
Cafe, Continental, Italian, Mexican, North Indian - 2
Fast Food, South Indian, Street Food - 2
Chinese, Continental, Italian, Mexican, North Indian - 2
Desserts, Juices - 2
Bakery, North Indian, South Indian, Street Food - 2
Chinese, Italian, Mexican - 2
Asian, Continental - 2
American, Cafe - 2
Cafe, Continental, Desserts, Italian - 2
Chettinad, South Indian - 2
Cafe, Mexican - 2
Beverages, Juices - 2
Fast Food, Mithai, Street Food - 2
Chinese, Mithai, South Indian, Street Food - 2
Chinese, Continental, North Indian, Seafood - 2
Continental, Goan, North Indian - 2
Continental, Goan, North Indian, Seafood - 2
South American - 2
Bengali, Seafood - 2
Continental, North Indian, Thai - 2
American, European, Mediterranean, North Indian - 2
American, Cafe, Continental, Italian, North Indian, Seafood - 2
Beverages, Fast Food, North Indian - 2
Continental, Healthy Food, Italian, Juices, Salad - 2
American, Burger, Continental - 2

Continental, European, Finger Food, North Indian - 2
Bakery, Cafe, Italian - 2
Italian, Mexican, North Indian - 2
Asian, Chinese, Japanese, Korean - 2
Chinese, Continental, Finger Food, North Indian - 2
Drinks Only - 2
Gujarati, Rajasthani - 2
American, European, Street Food - 2
Cafe, North Indian - 2
Bakery, Fast Food, Mithai - 2
Chinese, Desserts, Fast Food, North Indian - 2
Oriya - 2
Bakery, Chinese, North Indian - 2
Modern Indian, North Indian - 2
American, Continental, Italian, North Indian - 2
Chinese, Continental, Mughlai, North Indian, Thai - 2
Continental, Italian, Mughlai, North Indian - 2
Afghani, North Indian - 2
Chinese, Mithai, North Indian - 2
Goan - 2
Awadhi, Lucknowi, Mughlai - 2
Asian, Italian, Japanese, Thai - 2
Cafe, Fast Food, Street Food - 2
Asian, Chinese, Continental, Mediterranean, North Indian - 2
Cafe, Fast Food, Italian, Mexican - 2
Lucknowi, Mughlai - 2
Cafe, Desserts, Italian - 2
Continental, Italian, Lebanese, Mexican - 2
Continental, North Indian, South Indian - 2
Maharashtrian, North Indian - 2
Continental, North Indian, Seafood - 2
Parsi - 2
Bakery, Chinese, Desserts, Fast Food - 2
Chinese, Fast Food, Pizza - 2
Bengali, Chinese, North Indian - 2
Desserts, Fast Food, Ice Cream, North Indian - 2
Chinese, North Indian, Seafood - 2
Kashmiri, North Indian - 2
North Eastern - 2
Mughlai, Street Food - 2
Bengali, Biryani, Mughlai, North Indian - 2
Fast Food, Italian, North Indian - 2
American, Continental, Italian, Mexican, North Indian - 2
Chinese, Continental, Italian, Mughlai, North Indian, Thai - 2
Continental, Finger Food, Italian, North Indian - 2
Kashmiri, Mughlai, North Indian - 2
French, Italian - 2
Cafe, Continental, Healthy Food - 2
Beverages, Chinese - 2

Chinese, Continental, Italian, Lebanese, North Indian - 2
Chinese, Naga - 2
Mediterranean, Middle Eastern, North Indian - 2
Chinese, Continental, Healthy Food, North Indian - 2
Fast Food, Healthy Food - 2
European, Italian, North Indian - 2
Continental, Italian, Mediterranean - 2
American, Fast Food, Italian - 2
Chinese, Continental, Thai - 2
Continental, Healthy Food, Juices, Salad - 2
Continental, Mediterranean, North Indian - 2
Beverages, Chinese, Fast Food, Mithai, North Indian, South Indian, Street Food - 2
American, Bakery, Continental, Italian - 2
Continental, Italian, Mediterranean, North Indian, Spanish - 2
Hyderabadi - 2
Chinese, South Indian, Street Food - 2
American, Chinese, North Indian - 2
Asian, Chinese, Continental, Mughlai, North Indian - 2
Chinese, Continental, Finger Food, Italian - 2
Cafe, Desserts, Fast Food - 2
American, Asian, Mediterranean - 2
Bakery, Beverages, Fast Food - 2
Tibetan - 2
American, Cafe, Italian - 2
Chinese, Finger Food, Italian, North Indian - 2
Chinese, European, North Indian - 2
Chinese, Fast Food, Mithai, South Indian - 2
Bakery, Fast Food, Pizza - 2
American, Italian, Mexican, North Indian, Tex-Mex - 2
Chinese, Italian, North Indian, Thai - 2
Chinese, Italian, Lebanese, Mexican, North Indian - 2
Chinese, Fast Food, Mithai, North Indian - 2
Asian, Chinese, Seafood - 2
Cafe, Chinese, Fast Food, Italian, North Indian - 2
Cafe, Chinese, Continental, Italian, North Indian - 2
Awadhi, North Indian - 2
Italian, Seafood - 2
Chinese, Italian, North Indian, South Indian - 2
Desserts, European - 2
Mithai, North Indian, South Indian - 2
American, Cafe, Chinese, Italian, North Indian - 2
Cafe, Chinese, Italian, Mexican, North Indian - 2
Continental, French, North Indian - 2
Burmese, Continental, Mughlai, North Indian - 2
Chinese, Chinese, North Indian, South Indian - 2
Seafood, Western - 2
Kiwi, Seafood - 2
Street Food, Taiwanese - 2

Malaysian - 2
British, Cafe - 2
Burger, Grill - 2
Chinese, Dim Sum - 2
British, Contemporary - 2
Curry, Indian - 2
American, Burger, Grill - 2
Pakistani - 2
Kebab - 2
Desserts, Kebab, Turkish Pizza - 2
Restaurant Cafe - 2
Desserts, French, Japanese - 1
Asian, Filipino, Indian, Seafood - 1
Asian, European, Filipino, Seafood - 1
Asian, European, Indian - 1
American, Desserts, Ice Cream - 1
American, Cafe, Filipino, Italian - 1
Cafe, Desserts, Korean - 1
American, Bakery, Cafe, Italian - 1
American, Japanese, Mediterranean, Seafood - 1
American, Asian, Italian, Seafood - 1
Fast Food, French - 1
Arabian - 1
Brazilian, Cafe - 1
Grill, Mexican - 1
Latin American, Peruvian - 1
American, Grill - 1
Bar Food, Brazilian, Seafood - 1
Bar Food, Beverages, Fast Food - 1
Brazilian, Healthy Food, Juices, Pizza - 1
Bakery, Brazilian, Sandwich - 1
Brazilian, Seafood - 1
BBQ, Steak - 1
Beverages, International - 1
Beverages, Brazilian, French - 1
Brazilian, Grill - 1
BBQ, Brazilian, Grill - 1
Burger, Gourmet Fast Food - 1
Brazilian, Italian - 1
Brazilian, Mineira - 1
Brazilian, North Eastern - 1
Bar Food, Beverages, Brazilian - 1
Asian, Chinese, Vegetarian - 1
Bar Food, Pizza, Sandwich - 1
Bar Food, Steak, Tapas - 1
Chinese, Seafood, Vegetarian - 1
Bar Food, Seafood, Tapas - 1
American, Breakfast, Diner - 1
Bar Food, Steak - 1
American, Southern, Southwestern - 1

Breakfast, Burger, Sandwich - 1
International, Southern, Vegetarian - 1
Sandwich - 1
Mexican, Spanish - 1
International, Southern - 1
Argentine, Desserts, Latin American - 1
Chinese, Steak - 1
American, Caribbean, Seafood - 1
International, Tapas, Vegetarian - 1
Desserts, Sandwich, Southern - 1
Breakfast, French - 1
Desserts, Italian, Pizza - 1
Bar Food, Sandwich, Seafood - 1
Mexican, Southwestern, Sushi - 1
Burger, Seafood - 1
European, Spanish - 1
Latin American, Steak - 1
Italian, Seafood, Vegetarian - 1
Sushi, Thai - 1
Japanese, Sushi, Teriyaki - 1
American, Mediterranean, Seafood - 1
Breakfast, Diner - 1
American, International, Sushi - 1
Mediterranean, Tapas, Vegetarian - 1
American, Breakfast, Desserts - 1
American, Cajun, Seafood - 1
Bar Food, Burger, Southern - 1
Japanese, Steak - 1
Breakfast, Diner, Southern - 1
Seafood, Steak, Vegetarian - 1
BBQ, Southern - 1
American, Tapas - 1
Canadian, Chinese - 1
Mexican, Tex-Mex - 1
BBQ, Breakfast, Southern - 1
American, Japanese, Sushi - 1
American, Diner, Southern - 1
Indian, Mediterranean, Middle Eastern - 1
Sushi, Teriyaki - 1
Burger, Pizza - 1
American, Breakfast, Greek - 1
American, French - 1
American, BBQ, Bar Food - 1
BBQ, Burger, Desserts - 1
American, Coffee and Tea - 1
BBQ, Cajun, Caribbean - 1
Asian, Sushi, Thai - 1
Latin American, Mexican - 1
Asian, Bubble Tea, Vegetarian, Vietnamese - 1

Burger, Desserts, Vegetarian - 1
Breakfast, Mexican, Southwestern - 1
Coffee and Tea, Modern Australian, Tea - 1
American, BBQ, Seafood - 1
International, Pizza - 1
Breakfast, Pizza - 1
American, Burger, Cafe, Pizza - 1
Modern Australian, Tea - 1
Australian, Cafe - 1
American, Sandwich, Seafood - 1
American, Burger, Cajun - 1
Bar Food, Seafood, Vegetarian - 1
BBQ, Sandwich - 1
American, European, Sandwich - 1
German, Ice Cream - 1
Burger, German, Sandwich - 1
Cafe, Coffee and Tea, Modern Australian - 1
Cafe, Fusion, Italian - 1
Breakfast, Modern Australian - 1
Burger, Coffee and Tea, Modern Australian - 1
Burger, Desserts, Sandwich - 1
Coffee and Tea, Cuban, Latin American - 1
Bar Food, Burger, Desserts - 1
Desserts, Greek, Sandwich - 1
Greek, Mediterranean, Vegetarian - 1
American, Chinese, Sushi - 1
Pizza, Sandwich, Vegetarian - 1
American, Greek, Seafood - 1
Bar Food, Modern Australian - 1
Coffee and Tea, Modern Australian - 1
American, International, Southwestern - 1
Hawaiian - 1
American, Salad, Sandwich - 1
Irish - 1
New American, Tapas - 1
Brazilian, Steak - 1
Caribbean - 1
Asian, Latin American, Vegetarian - 1
American, Sandwich, Tea - 1
American, BBQ, Sandwich - 1
Cajun - 1
Cajun, Soul Food, Southern - 1
Mediterranean, Turkish - 1
American, Breakfast, Vegetarian - 1
Pub Food - 1
Cafe, Coffee and Tea, Sandwich - 1
Mexican, Southwestern, Tex-Mex - 1
Bar Food, Burger, Steak - 1
Italian, Pizza, Seafood - 1

European, International, Tapas - 1
American, Seafood, Sushi - 1
Caribbean, Seafood, Steak - 1
Burger, Sandwich, Seafood - 1
Caribbean, Seafood - 1
Greek - 1
Breakfast, Coffee and Tea, Modern Australian - 1
American, Greek - 1
American, Pizza - 1
Asian, Sushi, Vegetarian - 1
Indian, International, Vegetarian - 1
Desserts, Thai - 1
New American - 1
Indian, Persian - 1
American, Hawaiian - 1
Asian, Breakfast, Hawaiian - 1
Hawaiian, Seafood - 1
American, Asian, Burger - 1
Asian, European, Seafood - 1
American, Breakfast, Hawaiian - 1
Desserts, Ice Cream, Sandwich - 1
International, Mediterranean, Sandwich - 1
American, Bar Food, Sandwich - 1
Breakfast, Vegetarian - 1
Breakfast, Cajun - 1
Breakfast, Diner, Sandwich - 1
Coffee and Tea, Desserts - 1
Pizza, Seafood, Steak - 1
Cafe, Sandwich, Southern - 1
American, Seafood, Southern - 1
Chinese, Continental, Singaporean - 1
European, French, Mediterranean - 1
Bakery, Cafe, French, Italian - 1
American, Japanese, Singaporean - 1
Chinese, Indian, Malay, Seafood, Singaporean - 1
Asian, Continental, Seafood - 1
Cantonese, Chinese, Dim Sum, Seafood - 1
Australian, German, Singaporean - 1
Fast Food, Fusion, Western - 1
American, Bakery, Burger, European, Fusion - 1
Cafe, Greek, Spanish, Turkish - 1
Asian, Vegetarian, Vietnamese - 1
American, Desserts, Diner - 1
Cajun, Caribbean, Mexican - 1
Asian, Thai, Vegetarian - 1
BBQ, Caribbean, Seafood - 1
Bar Food, British, Sandwich - 1
American, Desserts, Steak - 1
Breakfast, Spanish, Tapas - 1

Deli, Italian - 1
Sandwich, Seafood, Steak - 1
European, German - 1
Breakfast, Mexican - 1
Bar Food, Desserts - 1
International, Italian, Southern - 1
Mexican, Vegetarian - 1
Seafood, Steak - 1
Cuban, Spanish - 1
Australian, Modern Australian - 1
Australian - 1
Seafood, Southern - 1
Bar Food, Burger, Vegetarian - 1
Fast Food, Seafood - 1
Greek, Italian - 1
Coffee and Tea, Mediterranean - 1
Australian, Coffee and Tea, Tapas - 1
Italian, Pizza, Vegetarian - 1
Beverages, Coffee and Tea, Desserts - 1
Sandwich, Sushi, Tapas - 1
Burger, Greek, Sandwich - 1
Arabian, Middle Eastern, Turkish - 1
Chinese, Indonesian, Japanese, Thai, Vietnamese - 1
Biryani, Indian, Mughlai, North Indian - 1
Asian, Filipino, Japanese - 1
American, Mexican, Seafood - 1
Afghani, Hyderabad, Indian, Pakistani - 1
Arabian, Lebanese, Middle Eastern - 1
European, Italian, Mediterranean, Thai - 1
Indian, Rajasthani - 1
Indian, International - 1
Indian, North Indian, Street Food - 1
Asian, Indian - 1
Chinese, Goan, Indian, North Indian - 1
Chinese, Indian, North Indian, South Indian - 1
Biryani, Indian, Mughlai, South Indian - 1
Indian, Mughlai, Pakistani - 1
Afghani, Chinese, Indian, Pakistani - 1
Arabian, Bakery, Middle Eastern - 1
Gujarati, Mughlai, Rajasthani - 1
Desserts, South Indian - 1
Chinese, Italian, Mediterranean, Mexican, North Indian, Thai - 1
Continental, Desserts, Ice Cream - 1
Beverages, Desserts, Italian, Pizza - 1
Cafe, Continental, Desserts - 1
Asian, Continental, North Indian, South Indian - 1
Chinese, Continental, Desserts, Fast Food, North Indian, Sandwich - 1
Beverages, Cafe, Desserts, Pizza - 1
Beverages, Burger, Continental, Healthy Food, Italian, Mediterranean,

North Indian - 1
Asian, Italian, North Indian, South Indian - 1
American, Armenian, Cafe, Continental, Fast Food - 1
Biryani, Chinese, Continental, North Indian - 1
Cafe, Mughlai, North Indian - 1
American, Cafe, Chinese, Continental, Italian, North Indian - 1
American, Burger, Cafe - 1
Chinese, Desserts, Italian, North Indian, Street Food - 1
Continental, Finger Food, Italian, North Indian, South Indian, Thai - 1
Fast Food, Mexican, Tex-Mex - 1
Arabian, Asian, Continental, Mediterranean, North Indian - 1
Cafe, Charcoal Grill, Steak - 1
Bakery, Cafe, Italian, Mexican - 1
Beverages, Chinese, Mexican, North Indian - 1
Cafe, Chinese, Fast Food, Seafood - 1
Chinese, Continental, North Indian, Pizza - 1
Asian, Burmese, Chinese, Japanese, Malaysian, Thai - 1
Continental, Finger Food, Italian, Thai - 1
Burger, Chinese, Continental, Italian, North Indian - 1
Beverages, Burger, Desserts, Fast Food - 1
Desserts, European, Italian - 1
Arabian, Chinese, North Indian - 1
Cafe, Continental, European, Greek, Italian, Mediterranean, Spanish - 1
Arabian, Asian, Mediterranean, North Indian - 1
Chettinad, North Indian, South Indian - 1
Continental, Desserts, Fast Food, Indian - 1
Chinese, Continental, Malaysian, North Indian, Thai - 1
North Indian, Parsi - 1
Desserts, Italian, North Indian - 1
Chinese, Desserts, Fast Food, North Indian, South Indian, Street Food - 1
Chinese, Thai, Tibetan - 1
Burger, Desserts - 1
Asian, Chinese, Mediterranean, North Indian - 1
Gujarati, North Indian, Rajasthani, South Indian - 1
Beverages, Desserts, Fast Food, Ice Cream - 1
American, Cafe, Italian, Mexican, Thai - 1
Chinese, Fast Food, North Indian, Raw Meats - 1
Cafe, Italian, Salad - 1
Bakery, Chinese, Mithai, South Indian, Street Food - 1
Bakery, Cafe, Desserts, Fast Food - 1
Cafe, French, Italian - 1
Continental, Goan, Italian, North Indian, Seafood - 1
French, Seafood - 1
Chinese, Continental, Goan, North Indian, Seafood - 1
Chinese, Goan, North Indian, Seafood - 1
Continental, Goan, Italian - 1

Chinese, Goan, North Indian - 1
Chinese, Goan, Seafood - 1
Goan, North Indian, Seafood - 1
Continental, European, German, Seafood - 1
Kerala, Seafood, South Indian - 1
Desserts, Pizza - 1
Chinese, Mughlai, South Indian - 1
Italian, Lebanese, Pizza - 1
Chinese, Japanese, North Indian, Thai - 1
Belgian, Cafe - 1
Continental, Mediterranean - 1
Asian, Chinese, Continental, European, Italian, North Indian - 1
Asian, Burmese - 1
Arabian, Lebanese, North Indian, Persian - 1
Chinese, Japanese, Sushi - 1
American, Mediterranean, Mexican, North Indian - 1
American, Chinese, Italian - 1
Beverages, Salad - 1
Continental, European, Finger Food, Italian, North Indian - 1
Chinese, Continental, Italian, Japanese, North Indian, Thai - 1
Burmese, Chinese, Thai - 1
Asian, Continental, Italian, Pizza - 1
Cafe, Street Food - 1
Greek, Mughlai, North Indian - 1
American, Healthy Food, Mexican - 1
Bakery, Fast Food, Italian, Lebanese - 1
Chinese, Mediterranean, Mughlai, North Indian, Thai - 1
Beverages, Beverages, Salad - 1
Continental, Healthy Food, North Indian - 1
Beverages, Healthy Food, Juices - 1
Biryani, Lucknowi, North Indian - 1
Japanese, Korean, Tibetan, Vietnamese - 1
Asian, Chinese, North Indian - 1
Continental, European, Healthy Food, Salad - 1
Cafe, Continental, Italian, Pizza - 1
Cafe, Italian, Mexican - 1
Greek, Mediterranean - 1
American, European, North Indian - 1
Beverages, North Indian, Street Food - 1
Bakery, Cafe, European, Italian - 1
American, Continental, Finger Food, Italian, North Indian - 1
Hyderabadi, Mughlai - 1
Kashmiri, Mughlai - 1
Chinese, Italian, Mexican, Pizza - 1
American, Italian, North Indian - 1
Asian, Bakery - 1
Bengali, Chinese, Fast Food - 1
Mughlai, North Indian, Pakistani - 1
American, Italian, Japanese, Seafood, Thai - 1

American, Bakery, Cafe, Desserts, Italian - 1
Mughlai, North Indian, Rajasthani, South Indian, Street Food - 1
Lebanese, North Indian - 1
Continental, Finger Food - 1
Chinese, Korean - 1
Bakery, Beverages - 1
Beverages, Healthy Food, North Indian - 1
Continental, Fast Food, North Eastern, South Indian - 1
Continental, Italian, Lebanese, Mexican, Thai - 1
Biryani, Fast Food, Healthy Food, Pizza - 1
American, Asian, Biryani, North Indian - 1
Asian, Chinese, Continental, European, North Indian - 1
Burger, Continental, European, Finger Food, North Indian, Pizza - 1
African, Lebanese, Portuguese - 1
Asian, Seafood - 1
Bihari, Lucknowi, North Indian - 1
Asian, Italian, Kerala, North Indian, Parsi - 1
Bakery, Cafe, Desserts, Healthy Food, Italian - 1
Asian, Italian, North Indian - 1
Asian, Continental, Fast Food - 1
Continental, Healthy Food, Italian, Salad - 1
Chinese, Healthy Food, North Indian, South Indian - 1
Bakery, Chinese, Healthy Food, North Indian, South Indian - 1
Continental, Healthy Food, North Indian, Salad - 1
Healthy Food, North Indian - 1
Bakery, Bengali, Desserts, North Indian, South Indian - 1
Chinese, Indonesian, Malaysian, Thai - 1
Asian, North Indian, Rajasthani - 1
Bengali, Fast Food - 1
Healthy Food, Italian, North Indian, Salad - 1
Beverages, Desserts, South Indian - 1
American, Goan, Portuguese - 1
Beverages, Continental, Healthy Food, Italian, Juices, Lebanese, Salad - 1
Burger, Cafe, Pizza - 1
Burger, Charcoal Grill, Italian - 1
Bakery, Bakery, Desserts - 1
Fast Food, Healthy Food, Salad - 1
Asian, Chinese, European, Mediterranean, North Indian, Pizza - 1
Bakery, Mithai, Street Food - 1
American, Cafe, Continental, Italian - 1
Cafe, Continental, Desserts, Italian, Juices, Salad - 1
Asian, Chinese, Tibetan - 1
Charcoal Grill, Chinese, Continental, Fast Food, Mexican - 1
Arabian, Chinese, Continental, North Indian, Thai - 1
Andhra, Asian, Continental, Goan, Seafood - 1
Italian, Japanese, North Indian - 1
Andhra, Bengali, Chettinad, Chinese, Mughlai, North Indian - 1
Cafe, Desserts, Mexican - 1

Awadhi, Hyderabad - 1
Greek, Lebanese - 1
Cafe, Chinese, Italian, Mexican - 1
Cafe, Continental, Italian, Street Food - 1
Bakery, Cafe, Continental, Italian, Mexican - 1
Continental, Italian, Lebanese, North Indian, Thai - 1
Asian, Modern Indian - 1
Cafe, Continental, Italian, Japanese - 1
Beverages, Chinese, Continental, Desserts, Mexican, North Indian, Rajasthani - 1
Chinese, Continental, North Indian, Rajasthani - 1
Bakery, Continental, Italian - 1
Cafe, Fast Food, Italian, Mexican, North Indian - 1
Chinese, Continental, Desserts, Italian, Mexican, North Indian - 1
Continental, Finger Food, Italian, Mediterranean, North Indian - 1
Chinese, Continental, Indian - 1
Beverages, Cafe, Continental, Desserts, Ice Cream, Italian - 1
Arabian, Lebanese, Mediterranean, Mughlai, North Indian - 1
Chinese, Continental, Kerala, North Indian - 1
Biryani, Fast Food - 1
Chinese, North Indian, South Indian, Thai - 1
Fast Food, Kerala - 1
Chinese, Continental, Kerala, North Indian, Seafood, South Indian - 1
Biryani, Chinese, North Indian, Seafood - 1
Biryani, Chinese, Kerala, South Indian - 1
Cafe, Desserts, Italian, Mediterranean, Seafood - 1
Bakery, Cafe, Continental, Desserts - 1
American, Italian, Mediterranean, Mexican - 1
Asian, Continental, Middle Eastern - 1
Cafe, Chinese, Desserts, North Indian - 1
Biryani, Chinese, Mughlai, North Indian - 1
Asian, Continental, North Indian, Seafood - 1
American, Italian, Mediterranean - 1
American, Italian, Lebanese - 1
Cafe, Chinese, Continental, North Indian, Thai - 1
Asian, Chinese, Continental, North Indian, South Indian, Thai - 1
Chinese, Continental, Mediterranean - 1
Bakery, Cafe, Continental, Italian - 1
Bakery, Chinese, Continental, Italian - 1
Chinese, European - 1
Chinese, Mangalorean - 1
Chinese, Mangalorean, Mughlai, North Indian - 1
American, Burger, Healthy Food, Salad - 1
Bakery, Cafe, Chinese, Continental, Desserts, Finger Food, Italian, North Indian - 1
American, British, Continental, Italian, Japanese, Mexican - 1
Burger, Desserts, European, Finger Food, Italian, North Indian, Pizza, Street Food - 1
Andhra - 1

Andhra, Mughlai, North Indian - 1
Italian, North Indian, South Indian - 1
Beverages, Cafe, Continental, European - 1
Continental, South Indian - 1
Continental, Fast Food, Tea - 1
Chinese, Malwani, North Indian, Seafood - 1
Cuisine Varies - 1
Andhra, Continental, Goan, Kerala, Seafood, Thai - 1
Continental, Fast Food, North Indian, South Indian, Street Food - 1
Chinese, Mughlai, North Indian, Pizza - 1
Mughlai, North Indian, Street Food - 1
Andhra, Goan, Hyderabad, Seafood, South Indian - 1
Bakery, Burger, Continental, Desserts, Fast Food, Pizza - 1
Bakery, Burger, Continental, Desserts, Pizza - 1
Bakery, Desserts, Fast Food, Mithai - 1
Indonesian, Malaysian - 1
Chinese, Japanese, Malaysian, Thai, Vietnamese - 1
Bakery, Chinese, Continental, Fast Food, Italian - 1
Cafe, Healthy Food, North Indian - 1
Chettinad, Chinese, North Indian, South Indian - 1
Gujarati, North Indian, South Indian - 1
Ice Cream, Mithai, North Indian, Street Food - 1
Fast Food, Mughlai, North Indian, South Indian - 1
Bengali, Continental, Mughlai, North Indian - 1
American, Continental, Fast Food - 1
Continental, Italian, North Indian, Tex-Mex - 1
Lucknowi, North Indian - 1
Asian, Continental, Indian, Italian - 1
Burger, Finger Food, Juices - 1
Chinese, Italian, Mediterranean, North Indian - 1
Chettinad, Chinese, Italian, Lebanese, Mexican, North Indian - 1
Goan, Seafood - 1
Cafe, Fast Food, Italian, Japanese, North Indian - 1
Arabian, Mexican - 1
Bengali, Mughlai, North Indian, South Indian - 1
European, Finger Food, North Indian - 1
American, Continental, North Indian, Tex-Mex - 1
Asian, Continental, Mediterranean, North Indian - 1
American, Asian, Continental, Italian, North Indian - 1
Chinese, Italian, Japanese, Seafood - 1
American, Asian, Italian, North Indian - 1
American, Chinese, Italian, Middle Eastern, North Indian - 1
Chinese, Continental, Mediterranean, North Indian - 1
Continental, Healthy Food, Italian - 1
Asian, Fast Food, Mediterranean, North Indian - 1
Continental, Finger Food, Italian, Mexican, North Indian - 1
American, Burger, Continental, Mexican, Pizza, Tex-Mex - 1
Afghani, Mughlai, North Indian - 1
Continental, European, Seafood - 1

Asian, Continental, Sushi - 1
Chinese, Hyderabadi, Kashmiri, North Indian - 1
Chinese, Continental, South Indian - 1
American, Cafe, Continental, Italian, Lebanese, Mexican - 1
Desserts, Ice Cream, North Indian - 1
Chinese, European, Italian, Mexican, North Indian - 1
Asian, Chinese, Malaysian, Thai - 1
Arabian, Lebanese, Mediterranean - 1
American, Desserts, Fast Food - 1
Afghani, Chinese, Mughlai - 1
Chinese, Lucknowi - 1
Gujarati, North Indian, Rajasthani - 1
Andhra, South Indian - 1
European, Italian, Sushi - 1
Chinese, Kashmiri, Mughlai - 1
Chinese, Healthy Food - 1
American, Burger, Fast Food, Italian, Pizza - 1
British, Chinese, Italian - 1
American, Finger Food, Mexican - 1
Asian, Continental, European, Italian, North Indian, Pizza - 1
Bakery, Desserts, Ice Cream - 1
American, Italian, Mughlai, North Indian - 1
Chinese, Fast Food, Lebanese - 1
Mediterranean, Middle Eastern, Turkish - 1
Chinese, Naga, Seafood, Thai - 1
Healthy Food, Juices, Salad - 1
Cafe, Continental, Mexican - 1
Continental, Kerala - 1
Asian, Burger, Continental, Italian, Mediterranean - 1
Continental, Tex-Mex - 1
Chinese, Italian, Middle Eastern, North Indian, Thai - 1
American, Asian, European, North Indian - 1
American, British, Continental - 1
Chinese, Continental, Mediterranean, Thai - 1
Chinese, Kashmiri, Korean, North Indian, Thai - 1
Chinese, Continental, Japanese, North Indian, Thai - 1
Chinese, Japanese, Seafood, Sushi, Thai - 1
Finger Food, Italian - 1
Bakery, Healthy Food - 1
Asian, Chinese, Japanese, Korean, Thai - 1
Afghani, Mughlai - 1
Bihari, Fast Food, North Indian - 1
Cafe, Desserts, Healthy Food, Juices - 1
Mediterranean, North Indian, Spanish - 1
European, Lebanese, Mexican, North Indian - 1
American, European, Italian, North Indian, Thai - 1
Bakery, Chinese, Fast Food, Mithai, North Indian, South Indian - 1
Bakery, Beverages, Desserts, Fast Food - 1
Cafe, Continental, Lebanese, North Indian - 1

Desserts, Ice Cream, North Indian, Street Food - 1
Chinese, Continental, Fast Food, Italian, North Indian - 1
Beverages, Cafe, Chinese, Continental, Desserts, Italian - 1
Chinese, Fast Food, Ice Cream - 1
Desserts, Mithai - 1
Chinese, European, Italian, North Indian, Thai - 1
Fast Food, Tibetan - 1
European, North Indian, South Indian - 1
Fast Food, Gujarati, North Indian, Rajasthani - 1
Chinese, Fast Food, Italian, Lebanese, Mexican, North Indian - 1
American, Chinese, Italian, Lebanese, North Indian - 1
Continental, Italian, Kashmiri, Moroccan, North Indian - 1
Asian, Chinese, Japanese, Seafood, Thai, Vietnamese - 1
Cafe, Desserts, Tea - 1
Cafe, European, French, Italian - 1
Continental, European, Pizza - 1
American, Asian, European, Italian, Lebanese, Mexican, North Indian - 1
Bakery, Chinese, Mithai, North Indian, South Indian - 1
Biryani, Lucknowi - 1
Bakery, Fast Food, Street Food - 1
Bakery, Chinese, Fast Food, North Indian, South Indian - 1
Raw Meats, Street Food - 1
Cafe, French - 1
Bakery, Burger, Chinese, Fast Food - 1
Korean, Mughlai, Nepalese, North Indian, Tibetan - 1
Chinese, Continental, Mexican - 1
Cafe, Pizza - 1
Continental, European, French, North Indian - 1
Ice Cream, Street Food - 1
French, Japanese - 1
American, Bakery, Burger, Deli, Italian, Pizza, Sandwich - 1
Desserts, Middle Eastern, Turkish - 1
European, Lebanese, Mediterranean - 1
Continental, Fast Food, North Indian, South Indian - 1
Bakery, Fast Food, North Indian - 1
Chinese, Continental, Fast Food, Mughlai, North Indian - 1
Nepalese, South Indian - 1
North Indian, South Indian, Tibetan - 1
Cafe, North Eastern - 1
Cafe, Tibetan - 1
Asian, Continental, Italian, Mexican, North Indian - 1
Cafe, Desserts, Italian, Mexican, Salad - 1
Chinese, Japanese, Tibetan - 1
Japanese, Thai - 1
Chettinad, Chinese, North Indian, Seafood - 1
Asian, Chinese, Continental, North Indian, Thai - 1
Bakery, Cafe, Parsi - 1
Healthy Food, Japanese, Sushi - 1
Cafe, Fast Food, Healthy Food - 1

American, Asian, Mexican, North Indian, South Indian - 1
Asian, Chinese, North Indian, Thai - 1
Mexican, North Indian - 1
Bakery, Chinese, Mithai, North Indian, South Indian, Street Food - 1
Bakery, Mithai, North Indian - 1
Beverages, Burger, Chinese, Continental, Healthy Food, Italian, North Indian, Salad - 1
Mithai, South Indian - 1
Asian, Mughlai, North Indian - 1
Chinese, North Eastern, North Indian - 1
Chinese, Fast Food, Street Food - 1
North Eastern, North Indian - 1
Awadhi, Mughlai - 1
Fast Food, Mithai, South Indian - 1
Bakery, Pizza - 1
Chinese, Pizza, South Indian - 1
Fast Food, Italian, South Indian - 1
Desserts, South Indian, Street Food - 1
Bengali, Chinese - 1
Chinese, North Eastern - 1
Chinese, Indian, Mithai, North Indian, South Indian, Street Food - 1
Finger Food, Italian, Middle Eastern - 1
Arabian, Lebanese, Moroccan, Turkish - 1
Chinese, Indian - 1
Continental, Fast Food, Italian, North Indian - 1
Asian, Chinese, Fast Food, Italian, Japanese, North Indian - 1
Asian, Cafe, Fast Food, Italian - 1
Chinese, Fast Food, Italian, North Indian, Tibetan - 1
Chinese, Italian, North Indian, Seafood, Thai - 1
Chinese, Fast Food, Mithai, Street Food - 1
Bakery, Continental, Fast Food, Italian - 1
Bakery, Ice Cream - 1
Fast Food, Mithai, North Indian - 1
Chinese, Desserts, Fast Food - 1
Continental, Italian, Lebanese, North Indian - 1
Fast Food, Hyderabadi - 1
Bihari, North Indian, South Indian - 1
Asian, Japanese, North Indian - 1
Beverages, Fast Food, Tea - 1
Chinese, Continental, Italian, North Indian, Thai - 1
Chinese, Lebanese - 1
Chinese, Italian, Lebanese, Mexican, North Indian, Thai - 1
Armenian, Fast Food, Mughlai - 1
Chinese, Mithai, South Indian - 1
Armenian, Mughlai, North Indian - 1
Bakery, Italian, North Indian, South Indian - 1
Chinese, Continental, North Indian, Street Food - 1
Beverages, North Indian - 1
Chinese, Continental, Fast Food, Italian - 1

Fast Food, Maharashtrian, North Indian - 1
Cafe, Fast Food, Pizza - 1
Bakery, Cafe, North Indian, South Indian - 1
Bakery, Beverages, Chinese, Desserts, Fast Food, Street Food - 1
Cafe, Chinese, European, Mexican, North Indian, Thai - 1
American, Asian, European, Seafood - 1
Beverages, Healthy Food, Italian, Juices - 1
Lebanese, Mughlai, North Indian - 1
Asian, Continental, Fast Food, North Indian - 1
Asian, Cafe, Italian, North Indian - 1
Chinese, Mangalorean, North Indian - 1
Gujarati, Kashmiri, Maharashtrian, Mughlai, North Indian, South Indian - 1
Asian, Chinese, Continental, North Indian - 1
Asian, Continental, Italian, Mediterranean - 1
Asian, Continental, Modern Indian - 1
Chinese, Fast Food, Ice Cream, North Indian, South Indian - 1
American, Continental, European, Mediterranean, North Indian - 1
American, Continental, North Indian - 1
Naga, Tibetan - 1
Beverages, Continental, Pizza - 1
Bakery, Chinese, Naga, Tibetan - 1
Chinese, Fast Food, Tibetan - 1
Cafe, Korean - 1
North Indian, Tibetan - 1
American, Cafe, Continental, Nepalese - 1
Chinese, Continental, Fast Food - 1
Assamese - 1
Continental, North Indian, Pizza - 1
Asian, Chinese, Continental, Mediterranean - 1
Cafe, Continental, Italian, Lebanese, Mediterranean - 1
Arabian, North Indian - 1
Chinese, Continental, Fast Food, Mexican, North Indian - 1
American, Cafe, Chinese, Continental, Italian, Mexican - 1
Beverages, Fast Food, Italian - 1
American, Chinese, Continental, Italian, North Indian - 1
Cafe, Chinese, Fast Food, North Indian - 1
Chinese, Continental, Fast Food, North Indian, Thai - 1
Cafe, Chinese, Continental, Italian, Mexican, North Indian - 1
Cafe, Chinese, Continental, Mexican, North Indian - 1
Beverages, Desserts, Korean - 1
American, Indonesian, Italian, Mexican, Spanish, Thai, Vietnamese - 1
Bakery, Chinese, North Indian, South Indian - 1
Cafe, Chinese, North Indian, South Indian - 1
Continental, North Indian, Salad - 1
Asian, Chinese, Thai, Vietnamese - 1
Desserts, North Indian - 1
Ice Cream, Pizza - 1
Finger Food, Pizza, Salad - 1

Chinese, Continental, European, North Indian, Thai - 1
Afghani, Arabian, North Indian, Pakistani - 1
Asian, Burmese, Chinese, Indonesian, Malaysian, Thai - 1
Bakery, Desserts, Healthy Food - 1
Asian, Continental, European, North Indian - 1
Continental, Lebanese, North Indian - 1
Continental, Italian, North Indian, South Indian - 1
American, Cafe, Tea - 1
Italian, Spanish - 1
American, Finger Food - 1
European, Finger Food - 1
Kerala, Malaysian, Sri Lankan, Thai, Vietnamese - 1
Finger Food, Italian, Middle Eastern, Mughlai - 1
European, Mediterranean - 1
Malaysian, Thai - 1
Afghani, Fast Food, North Indian - 1
Bakery, Chinese, Mughlai, North Indian - 1
Continental, Mexican - 1
Chinese, Continental, Italian, Lebanese, Mexican, North Indian - 1
Cafe, Continental, Italian, Mediterranean, Mexican - 1
Bakery, Burger, Desserts, Fast Food, Finger Food, Pizza - 1
Fast Food, Lebanese, North Indian - 1
Awadhi - 1
Italian, Lebanese, North Indian - 1
Asian, Chinese, Japanese, Korean, Seafood, Thai - 1
American, Cafe, Continental - 1
Asian, Chinese, Japanese - 1
American, Continental, Italian, Mediterranean - 1
Continental, Mediterranean, Mexican - 1
Fast Food, Juices - 1
Continental, Mexican, North Indian - 1
Hyderabadi, Mughlai, North Indian - 1
Chinese, Continental, Mughlai - 1
Fast Food, Italian, Mexican - 1
American, Chinese, Continental, Fast Food, Italian, Mexican - 1
Chinese, Continental, Indian, North Indian - 1
North Indian, Pizza - 1
Chinese, Continental, North Indian, South Indian, Street Food - 1
Biryani, Chinese, Fast Food, Mughlai, North Indian - 1
Chinese, Desserts, Fast Food, Ice Cream, North Indian - 1
Asian, Cafe, Continental, Healthy Food, Italian - 1
Continental, Desserts, Italian, Lebanese, Mediterranean, North Indian, South Indian - 1
Bengali, North Indian, Seafood - 1
Mughlai, Mughlai, North Indian - 1
Continental, Salad - 1
Healthy Food, North Indian, Rajasthani - 1
Street Food, Tibetan - 1
Chinese, Mughlai, North Indian, Raw Meats - 1

Asian, Continental, Fast Food, Italian - 1
Beverages, Desserts, Fast Food, Italian - 1
Chinese, Kashmiri - 1
Bakery, North Indian - 1
Lucknowi, Mughlai, North Indian - 1
Chinese, Kashmiri, North Indian - 1
Beverages, Mithai - 1
Bakery, Beverages, North Indian, South Indian - 1
Beverages, Fast Food, Juices - 1
Bakery, Desserts, Fast Food, North Indian - 1
Continental, Lebanese, Mexican - 1
Middle Eastern, North Indian, Pizza - 1
Bakery, Cafe, Chinese, Continental, Italian, Mughlai, North Indian, Pizza - 1
Beverages, Desserts, Juices - 1
Bakery, French - 1
Asian, Chinese, Indonesian, Korean, Malaysian, Thai, Vietnamese - 1
Italian, North Indian, Seafood, South Indian - 1
Continental, French, Goan, Mangalorean - 1
Continental, North Eastern, North Indian - 1
Finger Food, Greek, Italian, Spanish - 1
Charcoal Grill, European, Indonesian, Italian, North Indian, Thai - 1
Asian, Desserts, European, Finger Food, Mediterranean, Modern Indian - 1
Continental, German, Italian - 1
American, Mexican, Tex-Mex - 1
Continental, European, Italian, North Indian - 1
Italian, Lebanese - 1
Continental, Desserts, Italian, North Indian - 1
Italian, Mediterranean, Mexican - 1
Chinese, Continental, Italian, Mexican - 1
Italian, Lebanese, Mexican - 1
Asian, Italian, Mexican, North Indian - 1
Mexican, Mughlai, North Indian, Thai - 1
American, Fast Food, Japanese, North Indian - 1
Burmese, Chinese, Japanese, Thai, Tibetan, Vietnamese - 1
American, Cafe, Fast Food - 1
Andhra, Biryani, Chinese, North Indian, Seafood - 1
Andhra, Chinese, North Indian - 1
BBQ, Cafe, Cajun, Chinese, Mughlai - 1
Chinese, Continental, Italian, North Indian, South Indian - 1
Andhra, Biryani - 1
Biryani, Chinese, Continental, North Indian, Seafood - 1
Biryani, Burger, Pizza - 1
American, Continental, North Indian, Thai - 1
Cafe, Coffee and Tea, Western - 1
Beverages, Cafe, Desserts - 1
Indonesian, Peranakan - 1
Cafe, Coffee and Tea, Indonesian, Italian, Western - 1

Bakery, Desserts, Western - 1
Asian, Indonesian, Western - 1
Asian, Cafe, Western - 1
Japanese, Ramen, Sushi - 1
Cafe, Western - 1
French, Western - 1
Indonesian - 1
Asian Fusion, Cafe - 1
European, Kiwi - 1
Asian, Asian Fusion, Filipino, Fusion, Malaysian, Pub Food, Thai - 1
Asian, Seafood, Sushi - 1
Cafe, Kiwi - 1
Cafe, Desserts, Ice Cream, Kiwi - 1
Cafe, European, Mexican - 1
Fish and Chips, Vietnamese - 1
French, Kiwi - 1
Cafe, European, Mediterranean - 1
British, Steak - 1
Contemporary - 1
Italian, Latin American - 1
Greek, Mediterranean, Middle Eastern - 1
Cafe, Desserts, Ice Cream - 1
Cafe, Scottish - 1
British, French - 1
Cafe, Indian - 1
Cantonese, Japanese, Sushi - 1
British, Scottish, Seafood - 1
British, Scottish, Steak - 1
Curry, Indian, Pakistani - 1
Cafe, Curry, Indian - 1
Cafe, Curry, Indian, North Indian - 1
Japanese, Ramen - 1
American, Desserts, Fast Food, Steak - 1
Grill, Seafood, Steak - 1
Afghani, Curry, Indian, Pakistani - 1
British, Burger, Cafe - 1
Indian, Seafood - 1
Grill, Indian - 1
American, Argentine - 1
Contemporary, European, Mediterranean - 1
Bakery, Chinese, Indian, Kerala - 1
Chinese, North Indian, Turkish - 1
Arabian, Bakery, Desserts, European, Japanese - 1
Grill, Pizza - 1
Cafe, Patisserie - 1
Bakery, Cafe, Tea, Vegetarian - 1
Asian, Grill, Seafood, Sushi - 1
Burger, Fast Food, Grill - 1
Asian, Japanese, Seafood, Sushi - 1

Bakery, Cafe, Desserts, Patisserie - 1
African, Seafood, Sushi - 1
Cafe, Mediterranean - 1
Contemporary, European - 1
Asian, Sushi, Tapas - 1
European, Pizza - 1
Burger, Finger Food, Pizza - 1
Beverages, Continental, Desserts, Grill, Ice Cream, International, Seafood, South African - 1
African - 1
Burger, Cafe, European, Grill, South African, Tapas - 1
Belgian, Beverages, Contemporary, Desserts, Finger Food, Healthy Food, International, Seafood - 1
American, Beverages, Burger - 1
American, Burger, Finger Food, German, Street Food - 1
Asian, Desserts, Durban, Indian, International - 1
Bakery, Cafe, Deli, European, Italian, Pizza - 1
Contemporary, Grill, Italian, Steak, Sushi - 1
Cafe, Grill - 1
European, South African, Steak - 1
Desserts, Italian, Mediterranean, Sushi - 1
Burger, Continental, Finger Food, Grill, Seafood, South African - 1
Beverages, Cafe, Desserts, Healthy Food, South African, Spanish, Tapas - 1
Burger, Continental, Grill, Street Food - 1
Contemporary, Italian - 1
Burger, Contemporary, European - 1
Beverages, Desserts, Grill, Italian, Pizza, Seafood - 1
Burger, Grill, Steak, Sushi, Tapas - 1
European, South African - 1
Chinese, North Indian, Sri Lankan - 1
American, Cafe, Continental, Sri Lankan - 1
Sri Lankan - 1
Malaysian, North Indian, Sri Lankan - 1
Beverages, Cafe, Fast Food - 1
American, Continental, Seafood - 1
American, Beverages, Fast Food, Steak - 1
Coffee and Tea, Patisserie - 1
Izgara, Kebab - 1
World Cuisine - 1
Italian, Mexican, World Cuisine - 1
Döner, Kebab, Turkish Pizza - 1
Turkish Pizza - 1
Desserts, Restaurant Cafe - 1
Desserts, Restaurant Cafe, Turkish - 1
Börek, Desserts - 1
Burger, Izgara - 1
Cafe, Patisserie, World Cuisine - 1
Italian, World Cuisine - 1

```

# Feature Engineering: Create a new column for cuisine combinations
df['Cuisine Combinations'] = df['Cuisines'].apply(lambda x:
', '.join(sorted(x.split(','))))

# Analysis: Group by cuisine combinations and calculate average rating
average_ratings = df.groupby('Cuisine Combinations')['Aggregate
rating'].mean().reset_index()

# Sort by average rating in descending order
average_ratings = average_ratings.sort_values(by='Aggregate rating',
ascending=False)

# Print the top cuisine combinations with highest average ratings
print("Top Cuisine Combinations with Highest Average Ratings:")
print(average_ratings.head(10))

```

```

Top Cuisine Combinations with Highest Average Ratings:

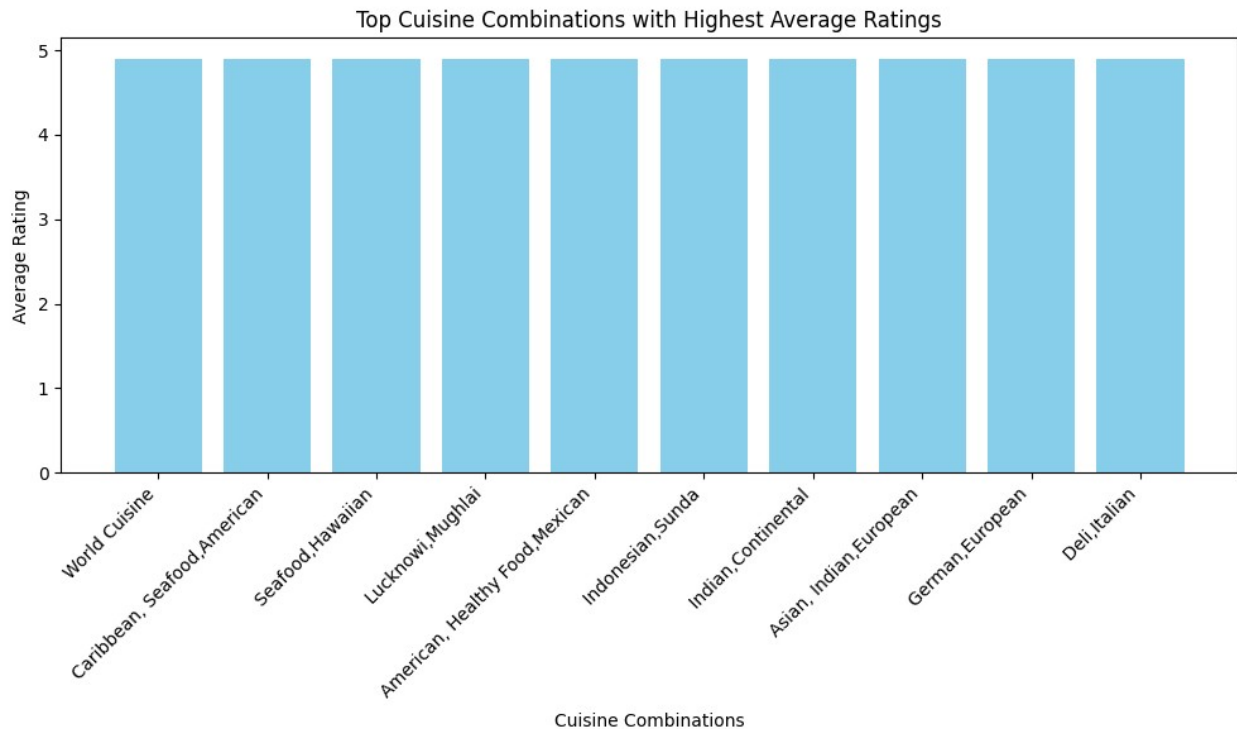
```

	Cuisine Combinations	Aggregate rating
1634	World Cuisine	4.9
504	Caribbean, Seafood,American	4.9
1443	Seafood,Hawaiian	4.9
1235	Lucknowi,Mughlai	4.9
54	American, Healthy Food,Mexican	4.9
1123	Indonesian,Sunda	4.9
1115	Indian,Continental	4.9
164	Asian, Indian,European	4.9
1066	German,European	4.9
891	Deli,Italian	4.9

```

plt.figure(figsize=(10, 6))
top_cuisine_combinations = average_ratings.head(10)
plt.bar(top_cuisine_combinations['Cuisine Combinations'],
top_cuisine_combinations['Aggregate rating'], color='skyblue')
plt.xlabel('Cuisine Combinations')
plt.ylabel('Average Rating')
plt.title('Top Cuisine Combinations with Highest Average Ratings')
plt.xticks(rotation=45, ha='right')
plt.tight_layout()
plt.show()

```



Task 3

Task: Geographic Analysis

```
!pip install folium
```

Collecting folium

Obtaining dependency information for folium from
<https://files.pythonhosted.org/packages/b9/98/9ba4b9d2d07dd32765ddb4e4c189dcbdd7dca4d5a735e2e4ea756f40c36b/folium-0.16.0-py2.py3-none-any.whl.metadata>

Downloading folium-0.16.0-py2.py3-none-any.whl.metadata (3.6 kB)

Collecting branca>=0.6.0 (from folium)

Obtaining dependency information for branca>=0.6.0 from
<https://files.pythonhosted.org/packages/17/ce/14166d0e273d12065516625fb02426350298e7b4ba59198b5fe454b46202/branca-0.7.1-py3-none-any.whl.metadata>

Downloading branca-0.7.1-py3-none-any.whl.metadata (1.5 kB)

Requirement already satisfied: jinja2>=2.9 in c:\users\user\appdata\local\programs\python\python312\lib\site-packages (from folium) (3.1.2)

Requirement already satisfied: numpy in c:\users\user\appdata\local\programs\python\python312\lib\site-packages (from folium) (1.26.2)

Requirement already satisfied: requests in c:\users\user\appdata\local\programs\python\python312\lib\site-packages (from folium) (2.31.0)

Collecting xyzservices (from folium)

Obtaining dependency information for xyzservices from

```
https://files.pythonhosted.org/packages/82/c3/e06dfa46464cce3eda4b86df8847cab99d9bc545c76807ee689545187a4c/xyzservices-2023.10.1-py3-none-any.whl.metadata
```

```
Downloading xyzservices-2023.10.1-py3-none-any.whl.metadata (4.0 kB)
```

```
Requirement already satisfied: MarkupSafe>=2.0 in c:\users\user\appdata\local\programs\python\python312\lib\site-packages (from jinja2>=2.9->folium) (2.1.3)
```

```
Requirement already satisfied: charset-normalizer<4,>=2 in c:\users\user\appdata\local\programs\python\python312\lib\site-packages (from requests->folium) (3.3.2)
```

```
Requirement already satisfied: idna<4,>=2.5 in c:\users\user\appdata\local\programs\python\python312\lib\site-packages (from requests->folium) (3.6)
```

```
Requirement already satisfied: urllib3<3,>=1.21.1 in c:\users\user\appdata\local\programs\python\python312\lib\site-packages (from requests->folium) (2.1.0)
```

```
Requirement already satisfied: certifi>=2017.4.17 in c:\users\user\appdata\local\programs\python\python312\lib\site-packages (from requests->folium) (2023.11.17)
```

```
Downloading folium-0.16.0-py2.py3-none-any.whl (100 kB)
```

```
----- 0.0/100.0 kB ? eta -:-:-:-  
----- 0.0/100.0 kB ? eta -:-:-:-  
----- 10.2/100.0 kB ? eta
```

```
-:-:-:-  
----- 30.7/100.0 kB 330.3 kB/s  
eta 0:00:01
```

```
----- 61.4/100.0 kB 469.7 kB/s  
eta 0:00:01
```

```
----- 100.0/100.0 kB 575.5 kB/s  
eta 0:00:00
```

```
Downloading branca-0.7.1-py3-none-any.whl (25 kB)
```

```
Downloading xyzservices-2023.10.1-py3-none-any.whl (56 kB)
```

```
----- 0.0/56.3 kB ? eta -:-:-:-  
----- 56.3/56.3 kB 2.9 MB/s eta
```

```
0:00:00
```

```
Installing collected packages: xyzservices, branca, folium
```

```
Successfully installed branca-0.7.1 folium-0.16.0 xyzservices-2023.10.1
```

```
[notice] A new release of pip is available: 23.2.1 -> 24.0
```

```
[notice] To update, run: python.exe -m pip install --upgrade pip
```

```
import folium
```

```
# Filter out restaurants with missing longitude or latitude values  
df = df.dropna(subset=['Longitude', 'Latitude'])
```

```
# Create a map centered at the mean latitude and longitude of all restaurants
```

```

map_center = [df['Latitude'].mean(), df['Longitude'].mean()]
restaurant_map = folium.Map(location=map_center, zoom_start=10)

# Add markers for each restaurant
for index, row in data.iterrows():
    folium.Marker([row['Latitude'], row['Longitude']],
    popup=row['Restaurant Name']).add_to(restaurant_map)

restaurant_map.save("restaurant_locations.html")

# Display the map
restaurant_map

<folium.folium.Map at 0x22a55a66bd0>

# Select latitude and longitude columns for clustering
X = data[['Latitude', 'Longitude']]

# Choose the number of clusters
num_clusters = 5

import pandas as pd
from sklearn.cluster import KMeans
import folium

# Perform K-means clustering
kmeans = KMeans(n_clusters=num_clusters, random_state=0)
kmeans.fit(X)

KMeans(n_clusters=5, random_state=0)

# Add cluster labels to the dataset
data['Cluster'] = kmeans.labels_

# Create a map centered at the mean latitude and longitude of all
restaurants
map_center = [data['Latitude'].mean(), data['Longitude'].mean()]
restaurant_map = folium.Map(location=map_center, zoom_start=10)

# Define colors for clusters
cluster_colors = ['red', 'blue', 'green', 'orange', 'purple']

# Add markers for each restaurant with cluster-specific colors
for index, row in data.iterrows():
    folium.CircleMarker([row['Latitude'], row['Longitude']], radius=5,
    color=cluster_colors[row['Cluster']], fill=True,
    fill_color=cluster_colors[row['Cluster']], fill_opacity=0.7,
    popup=row['Restaurant Name']).add_to(restaurant_map)

# Save the map as an HTML file
restaurant_map.save("restaurant_clusters.html")

```

```
# Display the map
restaurant_map

<folium.folium.Map at 0x22a615c3ef0>
```

Task 4

Task: Restaurant Chains

```
# Group restaurants by name and count the number of locations for each
name
chain_restaurants = df.groupby('Restaurant Name').size()

# Filter out restaurants with more than one location
chain_restaurants = chain_restaurants[chain_restaurants > 1]

# Print the chain restaurants
print("Chain Restaurants:")
print(chain_restaurants)
```

Chain Restaurants:	
Restaurant Name	
10 Downing Street	2
221 B Baker Street	3
34 Parkstreet Lane	2
34, Chowringhee Lane	12
4700BC Popcorn	2
..	..
Zaika	4
Zaika Kathi Rolls	2
Zizo	3
Zooby's Kitchen	2
buono	2

```
Length: 734, dtype: int64

# Group restaurants by name and calculate aggregate statistics
chain_stats = df.groupby('Restaurant Name').agg({
    'Aggregate rating': 'mean',
    'Votes': 'sum',
    'Country Code': 'first', # Assuming the chain operates in only
one country
    'City': 'nunique' # Count unique cities where the chain is
present
}).reset_index()

# Sort the chains by average rating in descending order
chain_stats = chain_stats.sort_values(by='Aggregate rating',
ascending=False)
```



```
# Print the top chains by average rating and popularity
```

```
print("Top Restaurant Chains:")
```

```
print(chain_stats.head(10))
```

```
Top Restaurant Chains:
```

Code	Restaurant Name	Aggregate rating	Votes	Country
4050	Masala Library	4.9	408	1
3958	Mainland China Restaurant	4.9	182	166
3993	Mama's Fish House	4.9	1343	216
4041	Marukame Udon	4.9	602	216
3145	Ingleside Village Pizza	4.9	478	216
4075	Mazzaro's Italian Market	4.9	1424	216
5757	Shorts Burger and Shine	4.9	820	216
5726	Sheroes Hangout	4.9	77	1
4078	McGuire's Irish Pub & Brewery	4.9	2238	216
5187	Rae's Coastal Cafe	4.9	548	216

```
City
```

4050	1
3958	1
3993	1
4041	1
3145	1
4075	1
5757	1
5726	1
4078	1
5187	1

```
# Plotting
```

```
plt.figure(figsize=(10, 6))
```

```
# Plotting Average Rating
```

```
plt.subplot(1, 2, 1)
```

```
plt.barh(chain_stats['Restaurant Name'][:10], chain_stats['Aggregate rating'][:10], color='skyblue')
```

```
plt.xlabel('Average Rating')
```

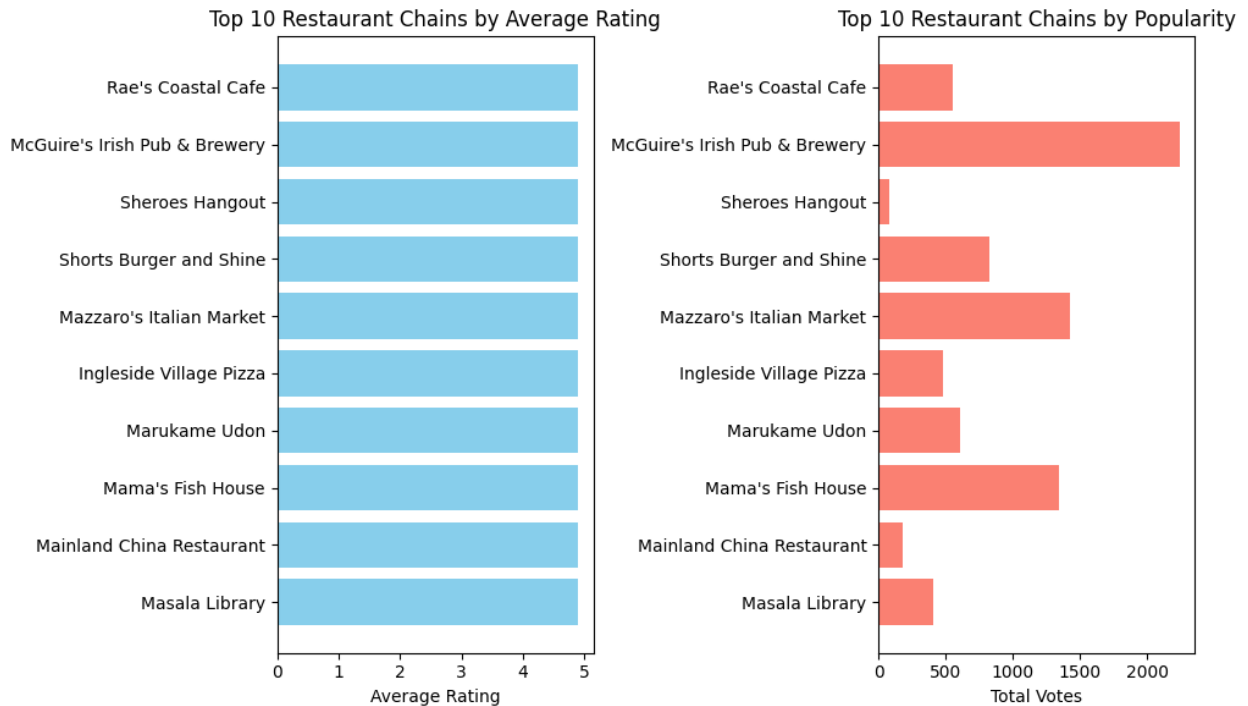
```
plt.title('Top 10 Restaurant Chains by Average Rating')
```

```

# Plotting Popularity (Total Votes)
plt.subplot(1, 2, 2)
plt.barh(chain_stats['Restaurant Name'][:10], chain_stats['Votes'][:10], color='salmon')
plt.xlabel('Total Votes')
plt.title('Top 10 Restaurant Chains by Popularity')

plt.tight_layout()
plt.show()

```



Level 3

Task 1

Task: Restaurant Reviews

```

import pandas as pd
from nltk.tokenize import word_tokenize
from nltk.corpus import stopwords
from nltk.sentiment import SentimentIntensityAnalyzer
from sklearn.feature_extraction.text import CountVectorizer

# Text preprocessing
stop_words = set(stopwords.words('english'))

def preprocess_text(text):
    tokens = word_tokenize(text.lower())
    filtered_tokens = [word for word in tokens if word.isalpha() and

```

```

word not in stop_words]
    return ' '.join(filtered_tokens)

df['Cleaned Text'] = df['Rating text'].apply(preprocess_text)

# Sentiment analysis
sid = SentimentIntensityAnalyzer()

def get_sentiment(text):
    sentiment = sid.polarity_scores(text)['compound']
    return 'positive' if sentiment >= 0 else 'negative'

df['Sentiment'] = df['Cleaned Text'].apply(get_sentiment)

# Combine positive and negative reviews
positive_reviews = df[df['Sentiment'] == 'positive']['Cleaned Text']
negative_reviews = df[df['Sentiment'] == 'negative']['Cleaned Text']

# Initialize CountVectorizer
cv = CountVectorizer()

# Fit CountVectorizer on entire dataset
cv.fit(df['Cleaned Text'])

# Transform positive and negative reviews using the same vocabulary
positive_word_count = cv.transform(positive_reviews)
negative_word_count = cv.transform(negative_reviews)

# Get feature names
feature_names = cv.get_feature_names_out()

# Calculate word frequencies
positive_word_freq = pd.DataFrame(positive_word_count.toarray(),
    columns=feature_names).sum().sort_values(ascending=False)
negative_word_freq = pd.DataFrame(negative_word_count.toarray(),
    columns=feature_names).sum().sort_values(ascending=False)

# Print the most common positive and negative keywords
print("Most common positive keywords:")
print(positive_word_freq.head(10))

print("\nMost common negative keywords:")
print(negative_word_freq.head(10))

Most common positive keywords:
average      3737
good         3179
rated        2148
excellent    301
poor          0
dtype: int64

```

Most common negative keywords:

poor	186
average	0
excellent	0
good	0
rated	0

dtype: int64

Stylish visualization with matplotlib

```
plt.figure(figsize=(12, 6))
```

Plot most common positive keywords

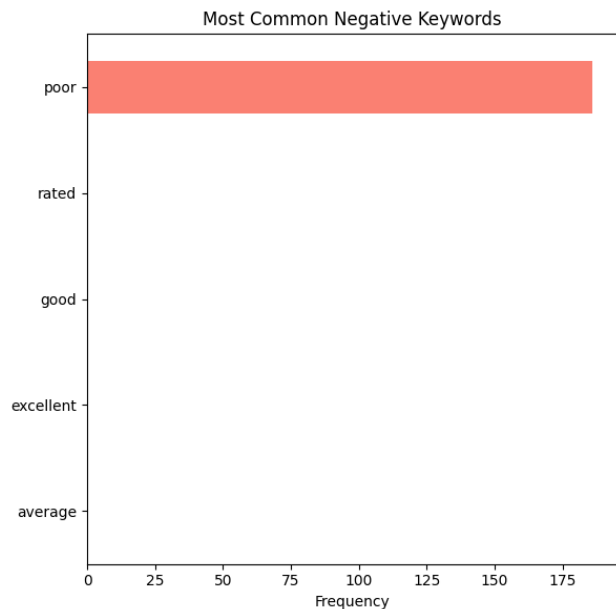
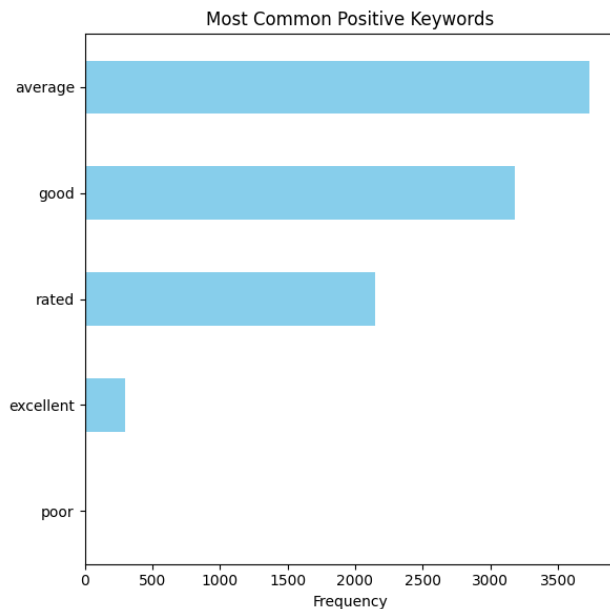
```
plt.subplot(1, 2, 1)
positive_word_freq.head(10).sort_values().plot(kind='barh',
color='skyblue')
plt.title('Most Common Positive Keywords')
plt.xlabel('Frequency')
```

Plot most common negative keywords

```
plt.subplot(1, 2, 2)
negative_word_freq.head(10).sort_values().plot(kind='barh',
color='salmon')
plt.title('Most Common Negative Keywords')
plt.xlabel('Frequency')
```

```
plt.tight_layout()
```

```
plt.show()
```



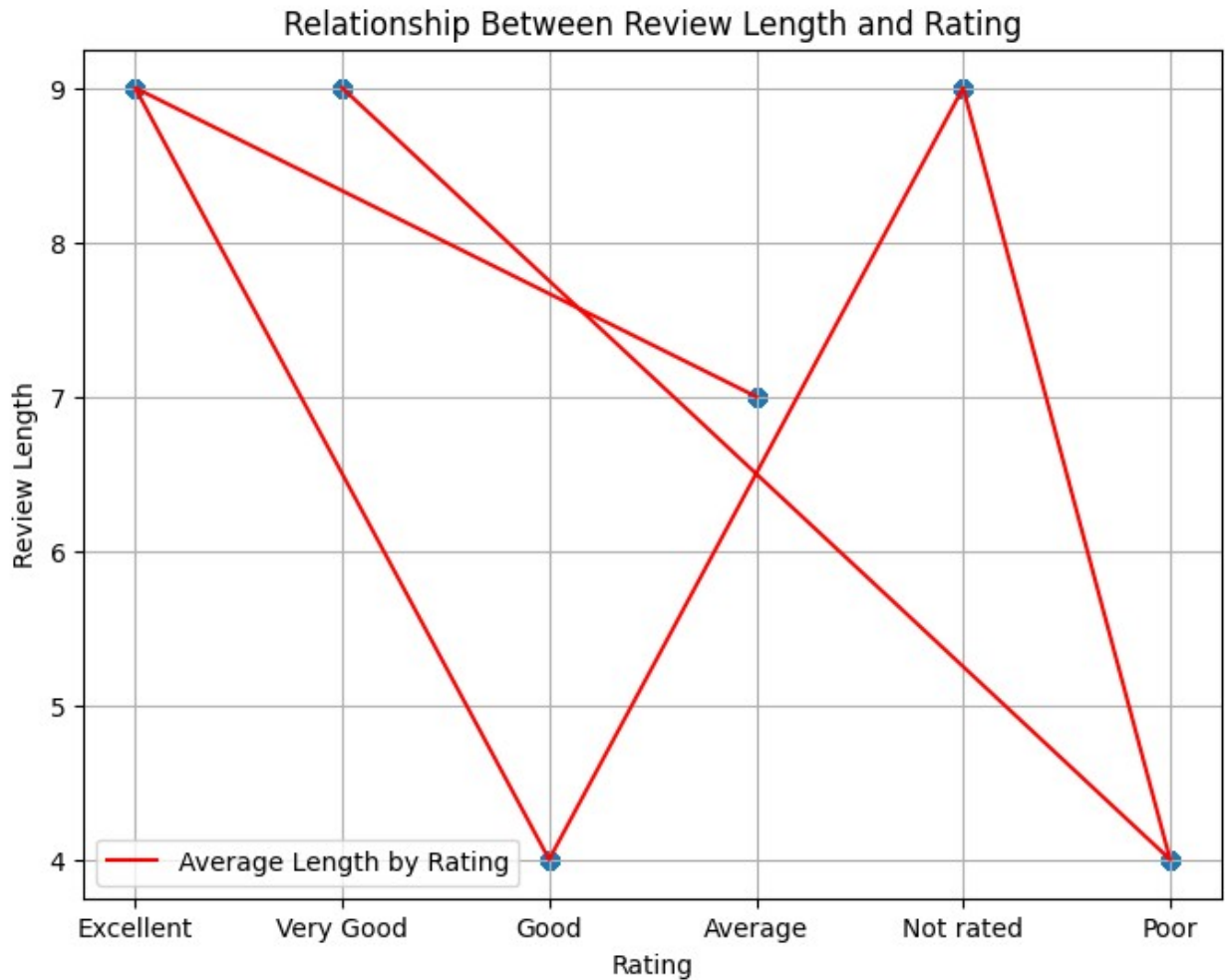
```
# Calculate the length of each review
df['Review Length'] = df['Rating text'].apply(len)

# Compute the average length of reviews
average_review_length = df['Review Length'].mean()
print("Average Review Length:", average_review_length)

Average Review Length: 7.020730813527379

# Group reviews by rating and calculate the average review length for each rating category
average_length_by_rating = df.groupby('Rating text')['Review Length'].mean()

# Visualize the relationship between review length and rating
plt.figure(figsize=(8, 6))
plt.scatter(df['Rating text'], df['Review Length'], alpha=0.5)
plt.plot(average_length_by_rating.index,
         average_length_by_rating.values, color='red', label='Average Length by Rating')
plt.xlabel('Rating')
plt.ylabel('Review Length')
plt.title('Relationship Between Review Length and Rating')
plt.legend()
plt.grid(True)
```



Task 2

Task: Votes Analysis

```
# Identify the restaurant with the highest number of votes
highest_votes_restaurant = df.loc[df['Votes'].idxmax()]

# Identify the restaurant with the lowest number of votes
lowest_votes_restaurant = df.loc[df['Votes'].idxmin()]

print("Restaurant with the highest number of votes:")
print(highest_votes_restaurant)

print("\nRestaurant with the lowest number of votes:")
print(lowest_votes_restaurant)
```

Restaurant with the highest number of votes:
Restaurant ID
51705
Restaurant Name

Toit
Country Code
1
City
Bangalore
Address 298, Namma Metro Pillar 62, 100 Feet Road,
Ind...
Locality
Indiranagar
Locality Verbose Indiranagar,
Bangalore
Longitude
77.640709
Latitude
12.979166
Cuisines Italian, American,
Pizza
Average Cost for two
2000
Currency Indian
Rupees(Rs.)
Has Table booking
No
Has Online delivery
No
Is delivering now
No
Switch to order menu
No
Price range
4
Aggregate rating
4.8
Rating color Dark
Green
Rating text
Excellent
Votes
10934
Cleaned Text
excellent
Sentiment
positive
Review Length
9
Rting Length
9
Rating Length
9

Name: 728, dtype: object

Restaurant with the lowest number of votes:

Restaurant ID

6710645

Restaurant Name

Cantinho da

Gula

Country Code

30

City

S00o

Paulo

Address

Rua Pedroso Alvarenga, 522, Itaim Bibi, S00o

P...

Locality

Itaim

Bibi

Locality Verbose

Itaim Bibi, S00o

Paulo

Longitude

-

46.675667

Latitude

-

23.581

Cuisines

Brazilian

Average Cost for two

55

Currency

Brazilian

Real(R\$)

Has Table booking

No

Has Online delivery

No

Is delivering now

No

Switch to order menu

No

Price range

2

Aggregate rating

0.0

Rating color

White

Rating text

Not

rated

Votes

0

Cleaned Text

rated

Sentiment

positive

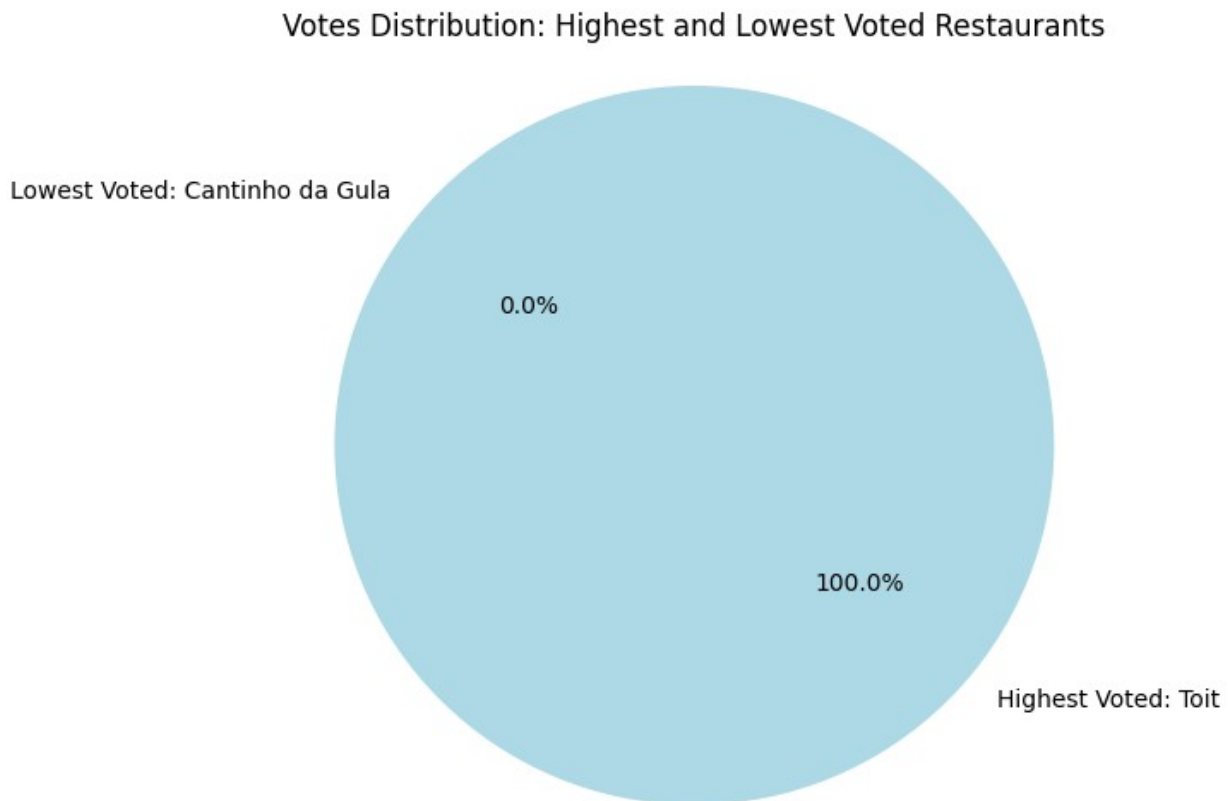

```

Review Length
9
Rting Length
9
Rating Length
9
Name: 69, dtype: object

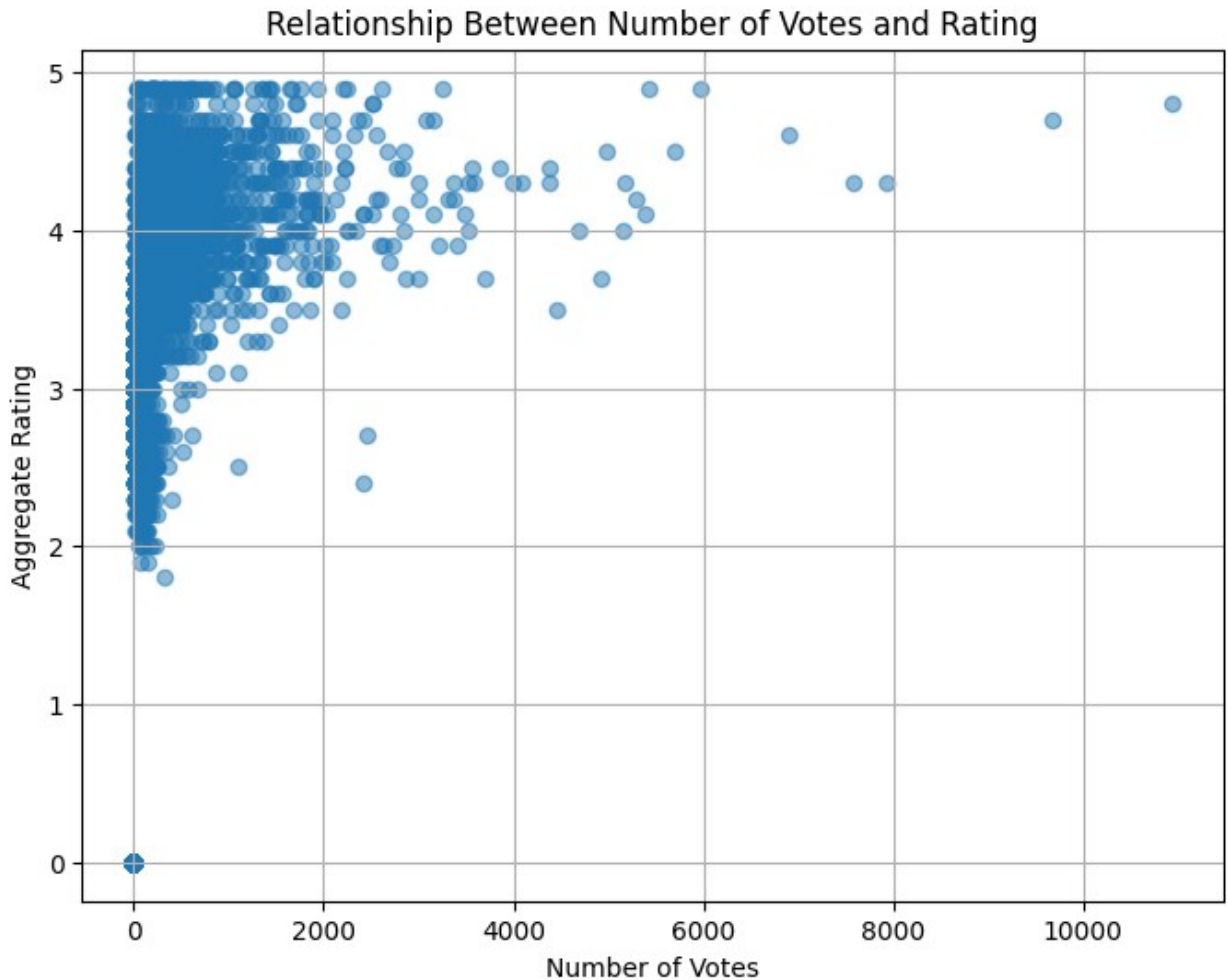
# Pie chart data
votes_data = [highest_votes_restaurant['Votes'],
lowest_votes_restaurant['Votes']]
labels = [f"Highest Voted: {highest_votes_restaurant['Restaurant Name']}", f"Lowest Voted: {lowest_votes_restaurant['Restaurant Name']}"]
colors = ['lightblue', 'yellow']

# Plotting pie chart
plt.figure(figsize=(8, 6))
plt.pie(votes_data, labels=labels, colors=colors, autopct='%1.1f%%',
startangle=140)
plt.axis('equal') # Equal aspect ratio ensures that pie is drawn as a circle.
plt.title('Votes Distribution: Highest and Lowest Voted Restaurants')
plt.show()

```



```
# Visualize the relationship between number of votes and rating
plt.figure(figsize=(8, 6))
plt.scatter(df['Votes'], df['Aggregate rating'], alpha=0.5)
plt.xlabel('Number of Votes')
plt.ylabel('Aggregate Rating')
plt.title('Relationship Between Number of Votes and Rating')
plt.grid(True)
plt.show()
```



Task 3

Task: Price Range vs. Online Delivery and Table Booking

```
# Create a cross-tabulation of price range and availability of online delivery
online_delivery_cross_tab = pd.crosstab(df['Price range'], df['Has Online delivery'])
```

```

# Create a cross-tabulation of price range and availability of table booking
table_booking_cross_tab = pd.crosstab(df['Price range'], df['Has Table booking'])

# Plotting
fig, axes = plt.subplots(1, 2, figsize=(12, 6))

# Plot cross-tabulation of price range and online delivery
online_delivery_cross_tab.plot(kind='bar', ax=axes[0],
color=['skyblue', 'salmon'], alpha=0.7)
axes[0].set_title('Availability of Online Delivery by Price Range')
axes[0].set_xlabel('Price Range')
axes[0].set_ylabel('Number of Restaurants')

# Plot cross-tabulation of price range and table booking
table_booking_cross_tab.plot(kind='bar', ax=axes[1], color=['skyblue',
'salmon'], alpha=0.7)
axes[1].set_title('Availability of Table Booking by Price Range')
axes[1].set_xlabel('Price Range')
axes[1].set_ylabel('Number of Restaurants')

plt.tight_layout()
plt.show()

```



```

# Calculate proportions of online delivery and table booking
availability within each price range
online_delivery_proportions = df.groupby('Price range')['Has Online
delivery'].value_counts(normalize=True).unstack().fillna(0)
table_booking_proportions = df.groupby('Price range')['Has Table

```

```

booking'].value_counts(normalize=True).unstack().fillna(0)

# Plotting
fig, axes = plt.subplots(1, 2, figsize=(12, 6))

# Plot proportions of online delivery availability by price range
online_delivery_proportions.plot(kind='bar', stacked=True, ax=axes[0],
color=['skyblue', 'salmon'], alpha=0.7)
axes[0].set_title('Proportion of Online Delivery by Price Range')
axes[0].set_xlabel('Price Range')
axes[0].set_ylabel('Proportion')
axes[0].legend(title='Online Delivery')

# Plot proportions of table booking availability by price range
table_booking_proportions.plot(kind='bar', stacked=True, ax=axes[1],
color=['skyblue', 'salmon'], alpha=0.7)
axes[1].set_title('Proportion of Table Booking by Price Range')
axes[1].set_xlabel('Price Range')
axes[1].set_ylabel('Proportion')
axes[1].legend(title='Table Booking')

plt.tight_layout()
plt.show()

```

