MERCURY

# title: "Zomato Restaurant Data Analysis Report" description: "An exploratory data analysis of Zomato's restaurant dataset." show-code: false hide-input: true parameters: city: label: "City" type: str value: "New Delhi"

## 📊 Introduction

This report provides an exploratory data analysis of the Zomato restaurant dataset, focusing on features such as ratings, city-wise distributions, and cuisine trends.

## 🧹 Data Cleaning

Here we handle missing values, data types, and ensure consistency in the dataset.

# Zomato Data Analysis Using Python By Pritam Nagar

| | name | online_order | book_table | rate | votes | approx_cost(for two people) | listed_in(type) |
|---|---|---|---|---|---|---|---|
| **0** | Jalsa | Yes | Yes | 4.1/5 | 775 | 800 | Buffet |
| **1** | Spice Elephant | Yes | No | 4.1/5 | 787 | 800 | Buffet |
| **2** | San Churro Cafe | Yes | No | 3.8/5 | 918 | 800 | Buffet |
| **3** | Addhuri Udupi Bhojana | No | No | 3.7/5 | 88 | 300 | Buffet |
| **4** | Grand Village | No | No | 3.8/5 | 166 | 600 | Buffet |

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| **...** | ... | ... | ... | ... | ... | ... | ... |
| **143** | Melting Melodies | No | No | 3.3/5 | 0 | 100 | Dining |
| **144** | New Indraprasta | No | No | 3.3/5 | 0 | 150 | Dining |
| **145** | Anna Kuteera | Yes | No | 4.0/5 | 771 | 450 | Dining |
| **146** | Darbar | No | No | 3.0/5 | 98 | 800 | Dining |
| **147** | Vijayalakshmi | Yes | No | 3.9/5 | 47 | 200 | Dining |

148 rows × 7 columns

| | votes | approx_cost(for two people) |
|---|---|---|
| **count** | 148.000000 | 148.000000 |
| **mean** | 264.810811 | 418.243243 |
| **std** | 653.676951 | 223.085098 |
| **min** | 0.000000 | 100.000000 |
| **25%** | 6.750000 | 200.000000 |
| **50%** | 43.500000 | 400.000000 |
| **75%** | 221.750000 | 600.000000 |
| **max** | 4884.000000 | 950.000000 |

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 148 entries, 0 to 147
Data columns (total 7 columns):
 #   Column                       Non-Null Count  Dtype 
---  ------                       --------------  ----- 
 0   name                         148 non-null    object
 1   online_order                 148 non-null    object
 2   book_table                   148 non-null    object
 3   rate                         148 non-null    object
 4   votes                        148 non-null    int64 
 5   approx_cost(for two people)  148 non-null    int64 
 6   listed_in(type)              148 non-null    object
dtypes: int64(2), object(5)
memory usage: 8.2+ KB
```

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|---|---|---|---|---|---|---|---|
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```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 148 entries, 0 to 147
Data columns (total 7 columns):
 #   Column                       Non-Null Count  Dtype
---  ------                       --------------  -----
 0   name                         148 non-null    object
 1   online_order                 148 non-null    object
 2   book_table                   148 non-null    object
 3   rate                         148 non-null    float64
 4   votes                        148 non-null    int64
 5   approx_cost(for two people)  148 non-null    int64
 6   listed_in(type)              148 non-null    object
dtypes: float64(1), int64(2), object(4)
memory usage: 8.2+ KB
```

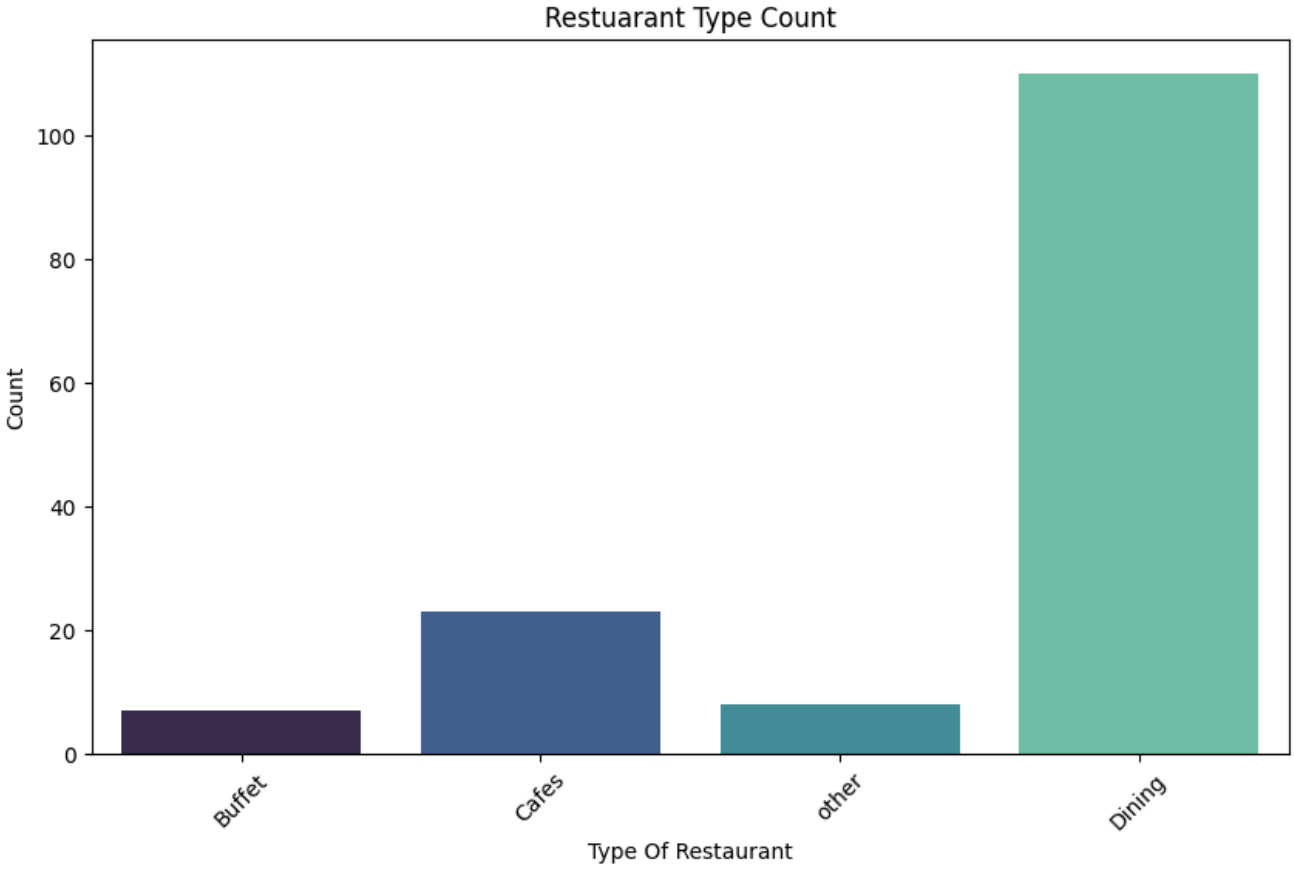
| | name | online_order | book_table | rate | votes | approx_cost(for two people) | listed_in(type) |
|---|---|---|---|---|---|---|---|
| **0** | False | False | False | False | False | False | False |
| **1** | False | False | False | False | False | False | False |
| **2** | False | False | False | False | False | False | False |
| **3** | False | False | False | False | False | False | False |
| **4** | False | False | False | False | False | False | False |
| **...** | ... | ... | ... | ... | ... | ... | ... |
| **143** | False | False | False | False | False | False | False |
| **144** | False | False | False | False | False | False | False |
| **145** | False | False | False | False | False | False | False |
| **146** | False | False | False | False | False | False | False |
| **147** | False | False | False | False | False | False | False |

148 rows × 7 columns

```
name                           0
online_order                   0
book_table                     0
rate                           0
votes                          0
approx_cost(for two people)    0
listed_in(type)                0
dtype: int64
```

# So Now There is no null values in dataFrame

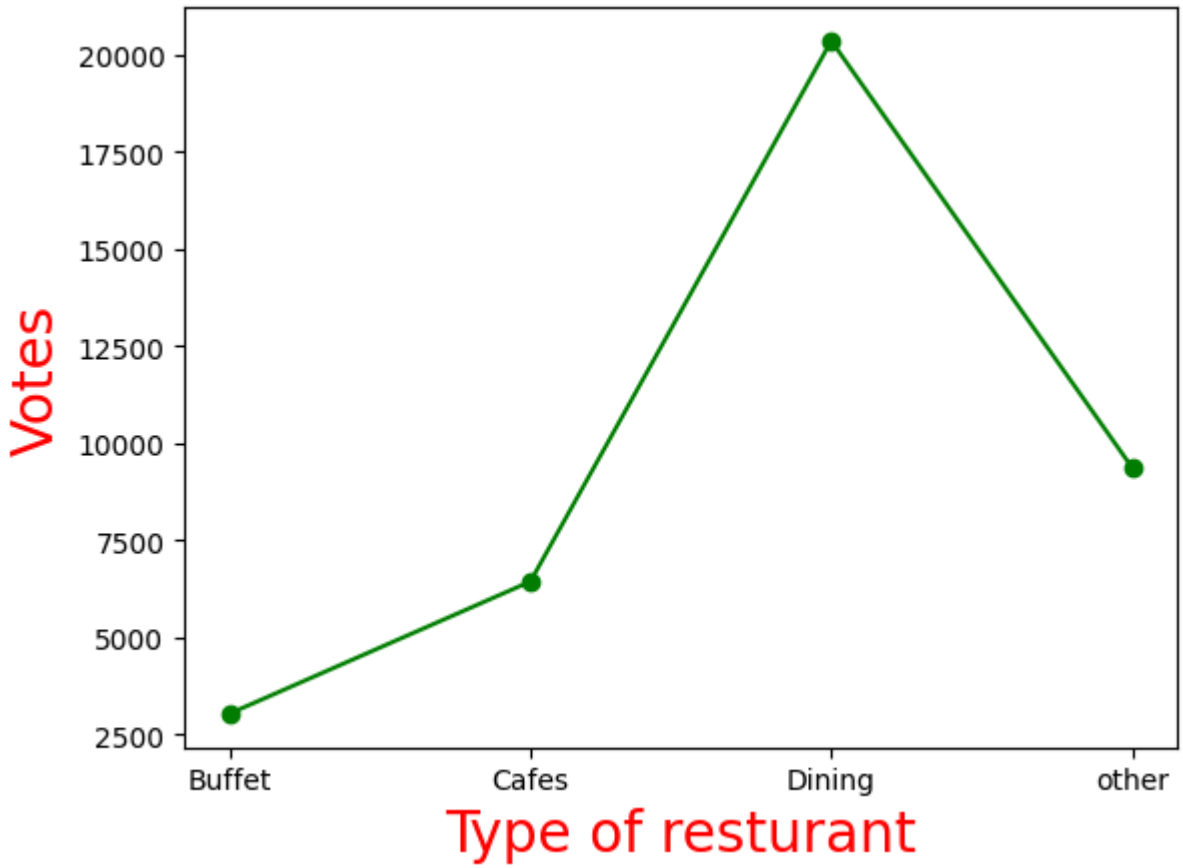
# Staring Data Visulization



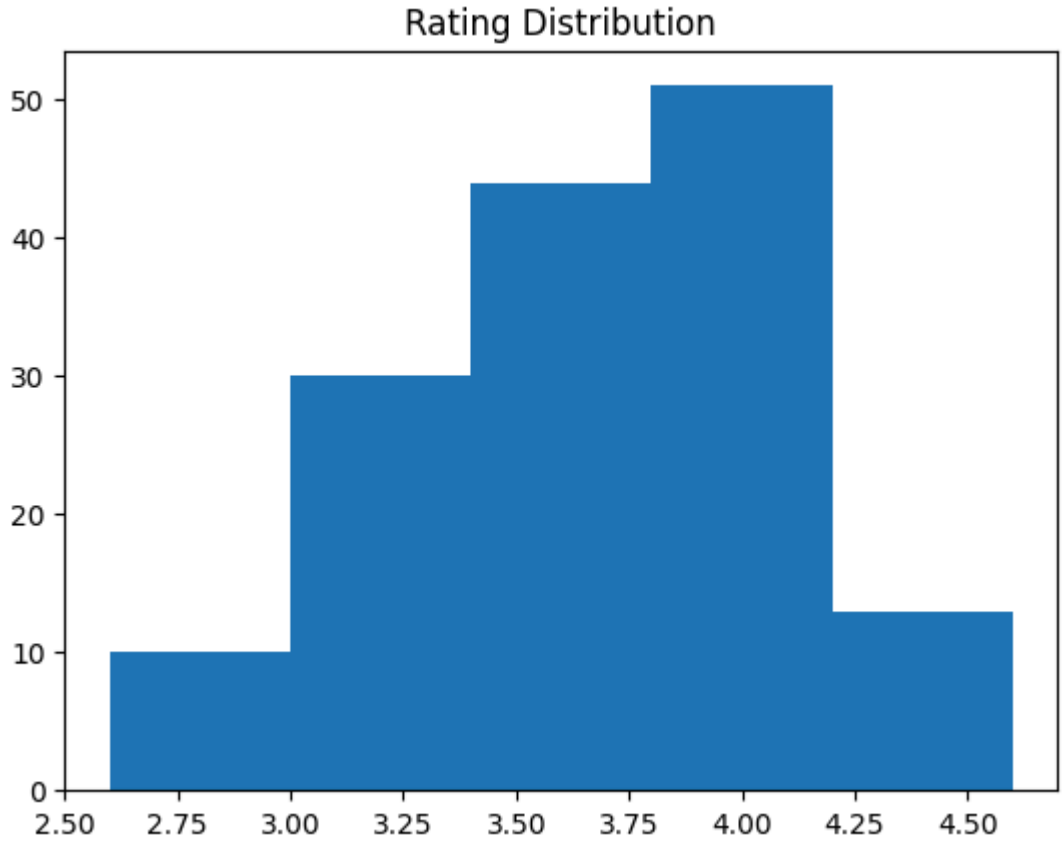

# Conclusion : Majority of restaurant fall into dining category

# Dining Restaurants are preferred by a larger number of individuals

```
Text(0, 0.5, 'Votes')
```

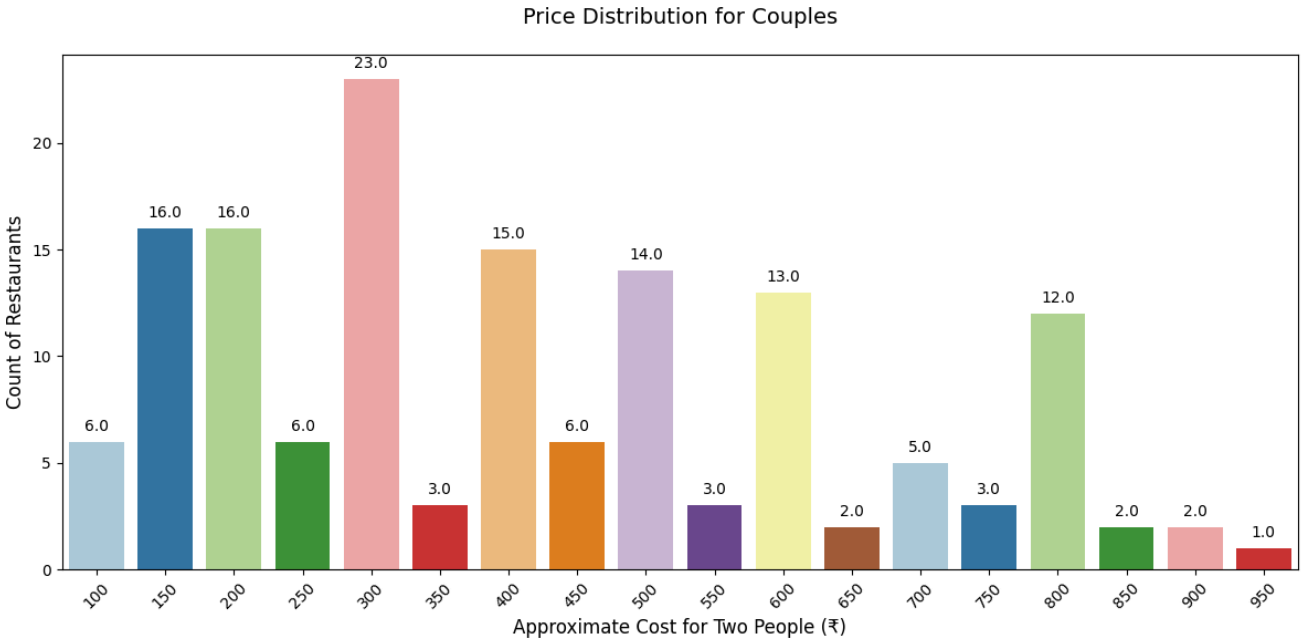



# The majority of resturant received ratings



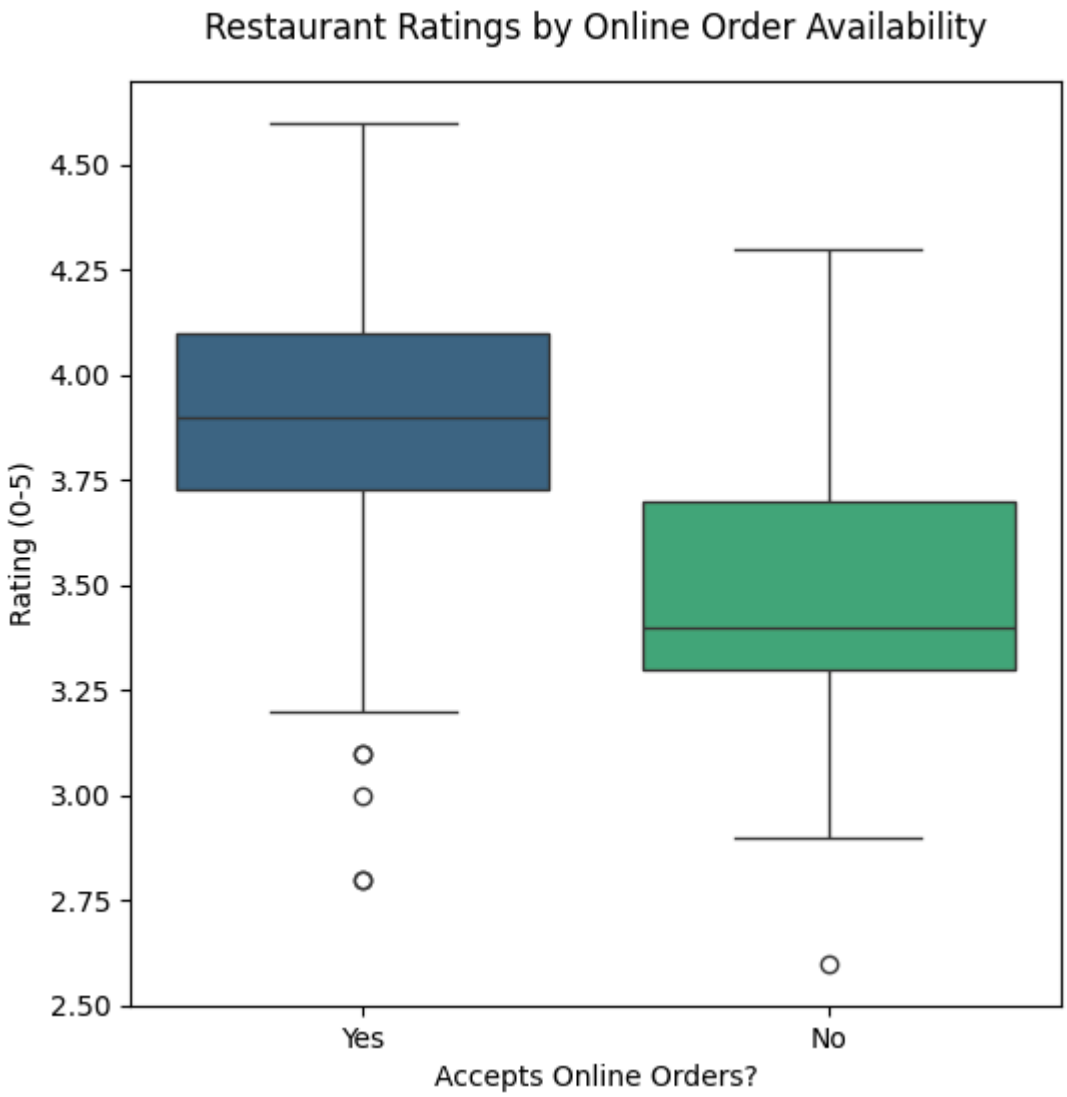
# Conclusion : Majority of rstaurants received ratings rang from 3.5⭐ to 4⭐

# Majority of couples prefer restaurant with an approximate cost of 300 rupees

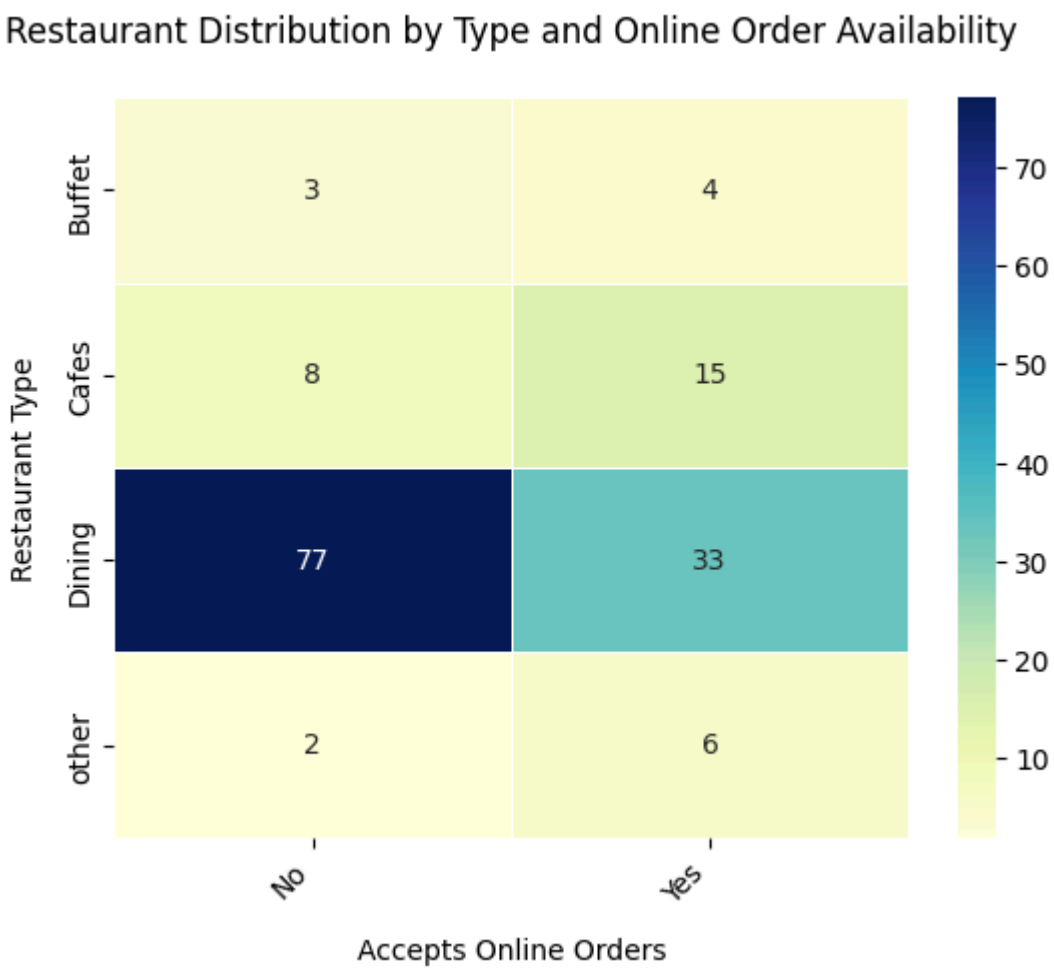



# Whether online order receive higher ratings than offline orders

```
Text(0, 0.5, 'Rating (0-5)')
```




# Conclusion : Offline order received lower ratings in compare to online order, which obtained excellent ratings.




# Conclusion : Dining restaurant primarily accept offline orders , where cafes primarily recive online orders. This suggest that clients prefer to place orders in person at restaurants , but perfer online ordering at cafes

## 📈 Exploratory Data Analysis (EDA)

In this section, we explore various features such as location distribution, ratings, and cuisine types through visualizations.

## 💡 Key Insights

We summarize interesting findings from the dataset, such as most popular cuisines, highest-rated restaurants, and top cities.

## 🏁 Conclusion

This analysis provides useful insights into restaurant trends and customer preferences based on the Zomato dataset.