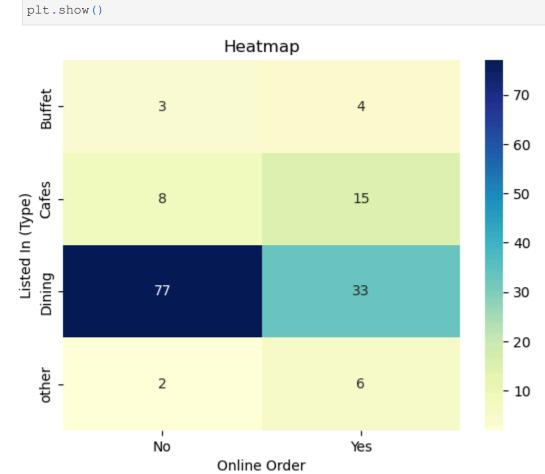
```
In [3]: dataframe = pd.read_csv("Zomato data .csv")
               print(dataframe.head())
                                             name online_order book_table rate votes \
                                           Jalsa Yes Yes 4.1/5
                             Spice Elephant Yes No 4.1/5 787
            2 San Churro Cafe Yes No 3.8/5 918
3 Addhuri Udupi Bhojana No No 3.7/5 88
4 Grand Village No No 3.8/5 166
                  approx_cost(for two people) listed_in(type)
                                                        800
                                                                              Buffet
                                                         800
                                                                              Buffet
                                                        800
                                                                              Buffet
                                                        300
                                                                              Buffet
                                                         600
                                                                              Buffet
  In [5]: def handleRate(value):
                            value=str(value).split('/')
                            value=value[0];
                            return float(value)
               dataframe['rate'] = dataframe['rate'].apply(handleRate)
               print(dataframe.head())
                                             name online_order book_table rate votes \
                                          Jalsa Yes Yes 4.1 775
            Spice Elephant Yes No 4.1 787
San Churro Cafe Yes No 3.8 918
Addhuri Udupi Bhojana No No 3.7 88
Grand Village No No 3.8 166
                  approx_cost(for two people) listed_in(type)
                                                        800
                                                                              Buffet
                                                        800
                                                                              Buffet
                                                        800
                                                                              Buffet
                                                        300
                                                                              Buffet
                                                         600
                                                                              Buffet
  In [7]: dataframe.info()
              <class 'pandas.core.frame.DataFrame'>
             RangeIndex: 148 entries, 0 to 147
             Data columns (total 7 columns):
            # Column | Non-Null Count Dtype | Data columns (total / columns):

# Column | Non-Null Count Dtype | Data columns | Non-Null Count Dtype | Data columns | Non-Null Count Dtype | Data columns | Dtype | Dtype | Data columns | Dtype | Dtype | Data columns | Dtype | Dt
              5 approx_cost(for two people) 148 non-null int64
                                                                   148 non-null object
              6 listed_in(type)
             dtypes: float64(1), int64(2), object(4)
             memory usage: 8.2+ KB
  In [9]: sns.countplot(x=dataframe['listed_in(type)'])
               plt.xlabel("Type of restaurant")
 Out[9]: Text(0.5, 0, 'Type of restaurant')
                  100
                   80
              count
                   60
                    40
                   20
                                  Buffet
                                                                                      other
                                                            Cafes
                                                                                                               Dining
                                                               Type of restaurant
              ##Conclusion: The majority of the restaurants fall into the dining category.
In [11]: grouped_data = dataframe.groupby('listed_in(type)')['votes'].sum()
               result = pd.DataFrame({'votes': grouped_data})
               plt.plot(result, c="green", marker="o")
               plt.xlabel("Type of restaurant", c="red", size=20)
               plt.ylabel("Votes", c="red", size=20)
Out[11]: Text(0, 0.5, 'Votes')
                     20000
                     17500
                     15000
             Votes
                    12500
                    10000
                       7500
                      5000
                      2500
                                                         Type of restaurant
                                Buffet
                                                                                                                              other
In [13]: #Conclusion: Dining restaurants are preferred by a larger number of individuals.
In [15]: max_votes = dataframe['votes'].max()
               restaurant_with_max_votes = dataframe.loc[dataframe['votes'] == max_votes, 'name']
               print("Restaurant(s) with the maximum votes:")
               print(restaurant_with_max_votes)
              Restaurant(s) with the maximum votes:
             38 Empire Restaurant
             Name: name, dtype: object
In [19]: sns.countplot(x=dataframe['online_order'])
Out[19]: <Axes: xlabel='online_order', ylabel='count'>
                  80
                  60
                  40
                  20
                                               Yes
                                                                  online_order
In [21]: plt.hist(dataframe['rate'],bins=5)
               plt.title("Ratings Distribution")
               plt.show()
                                                     Ratings Distribution
              50
              40
              30
              20
              10
                2.50 2.75 3.00 3.25 3.50 3.75 4.00 4.25 4.50
 In [ ]: #Conclusion: The majority of restaurants received ratings ranging from 3.5 to 4.
In [23]: couple_data=dataframe['approx_cost(for two people)']
               sns.countplot(x=couple_data)
Out[23]: <Axes: xlabel='approx_cost(for two people)', ylabel='count'>
                  20
                  15
                  10
                        100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950
                                                       approx_cost(for two people)
In [25]: plt.figure(figsize = (6,6))
               sns.boxplot(x = 'online_order', y = 'rate', data = dataframe)
Out[25]: <Axes: xlabel='online_order', ylabel='rate'>
                  4.50
                  4.25
```

2.50 Yes No

In [27]: pivot_table = dataframe.pivot_table(index='listed_in(type)', columns='online_order', aggfunc='size', fill_value=0)
 sns.heatmap(pivot_table, annot=True, cmap="YlGnBu", fmt='d')
 plt.title("Heatmap")
 plt.xlabel("Online Order")
 plt.ylabel("Listed In (Type)")
 plt.show()

In []: #CONCLUSION: Offline orders received lower ratings in comparison to online orders, which obtained excellent ratings



online_order

4.00

3.75

3.25

3.00

2.75

ate 3.50 J

In [1]: import pandas as pd

import numpy as np

import seaborn as sns

import matplotlib.pyplot as plt

In [29]: #CONCLUSION: Dining restaurants primarily accept offline orders, whereas cafes primarily receive online orders. This suggests that clients prefer to place orders in person at restaurants, but prefer online ordering at cafes.