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In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns

In [2]: dataframe = pd.read_csv("Zomato data .csv")
print(dataframe.head())

   name online_order book_table  rate votes \
0   Jalsa             Yes       Yes  4.1/5   775
1  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)
0                        800      Buffet
1                        800      Buffet
2                        800      Buffet
3                        300      Buffet
4                        600      Buffet

In [3]: dataframe

Out [3]:
```

	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
...
143	Melting Melodies	No	No	3.3/5	0	100	Dining
144	New Indraprastha	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

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In [4]: 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 \
0   Jalsa             Yes       Yes  4.1   775
1  Spice Elephant             Yes      No  4.1   787
2  San Churro Cafe             Yes      No  3.8   918
3  Addhuri Udupi Bhojana        No      No  3.7    88
4  Grand Village             No      No  3.8   166

   approx_cost(for two people) listed_in(type)
0                        800      Buffet
1                        800      Buffet
2                        800      Buffet
3                        300      Buffet
4                        600      Buffet

In [5]: dataframe.info()

<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

Conclusion - There is no NULL value in this data.
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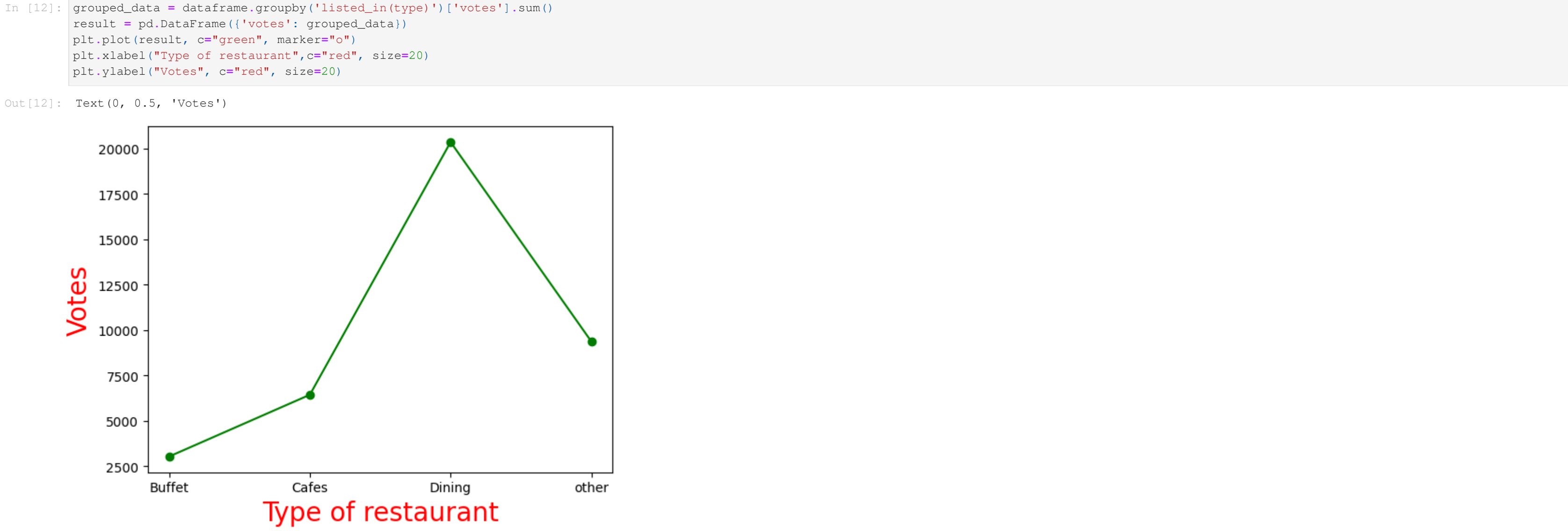
Exploratory Data Analysis

Q1.What type of restaurant do the majority of customers order from?



The majority of the restaurants fall into the dining category.Dining restaurants are preferred by a larger number of individuals.

Q2.How many votes has each type of restaurant received from customers?



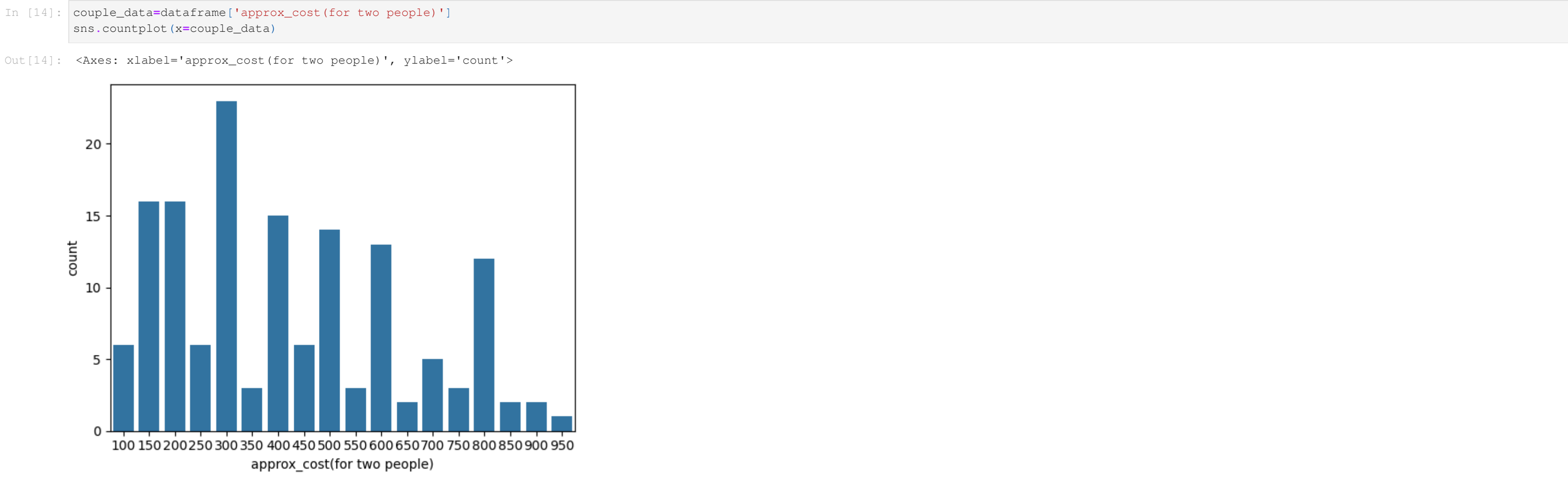
The majority of restaurants received ratings.

Q3.What are the ratings that the majority of restaurants have received?



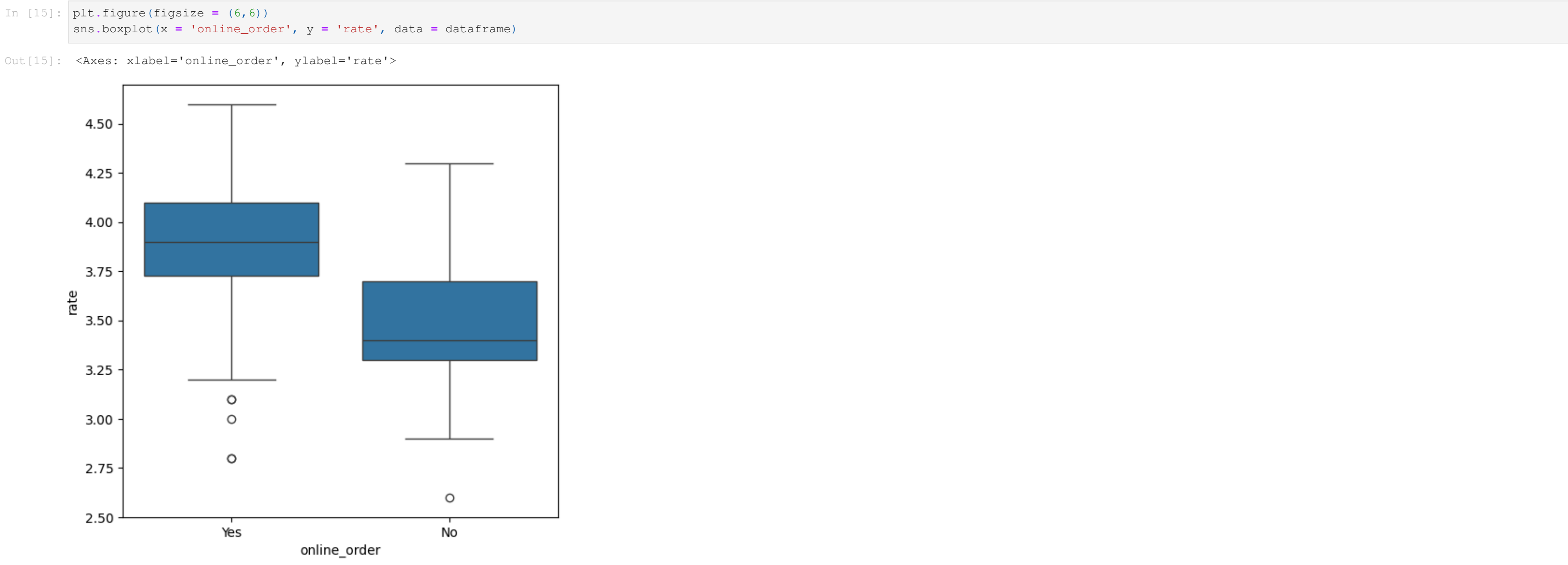
The majority of restaurants received ratings ranging from 3.5 to 4.

Q4.Zomato has observed that most couples order most of their food online. What is their average spending on each order?



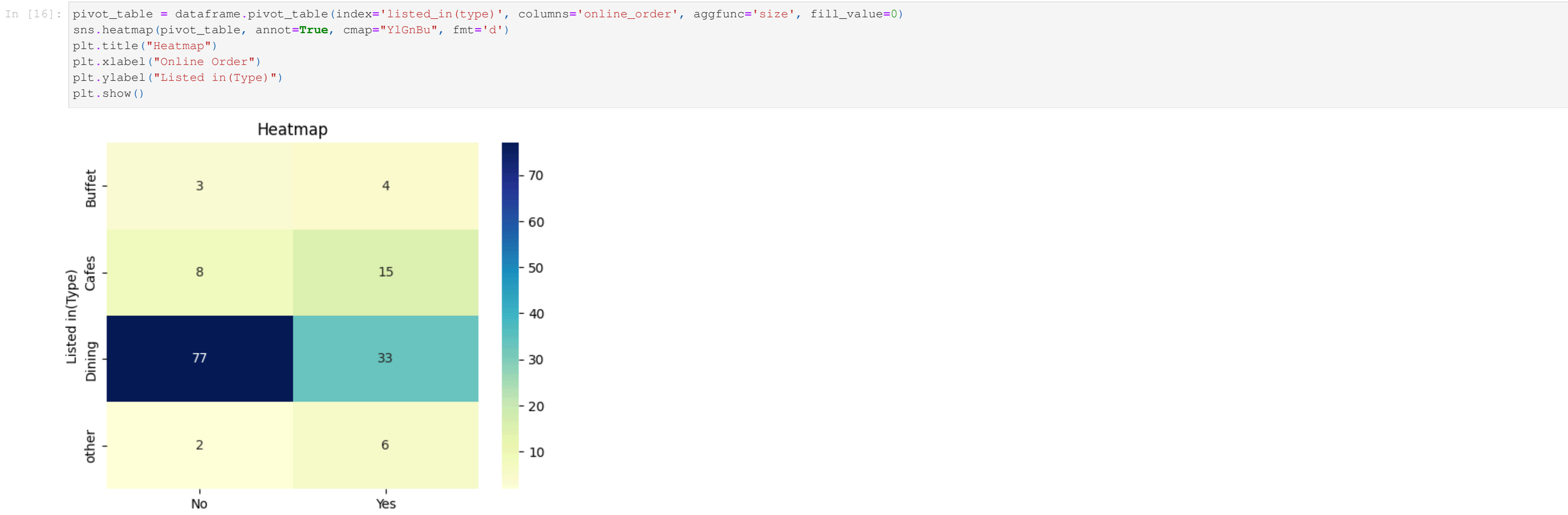
The majority of couples prefer restaurants with an approximate cost of 300 rupees.

Q5.Which mode (online or offline) has received the maximum rating?



Offline orders received lower ratings in comparasion to online orders, which obtained excellent ratings.

Q6.Which type of restaurant received more offline orders, so that Zomato can provide those customers with some good offers?



Conlusion: Dining restaurants primarily accept offline orders, whereas cafes primarily receive online orders. This suggests that client prefer to place orders in person at restaurants, but prefer online ordering at cafes.

