

```
In [255]_ import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns

In [256]_ dataframe=pd.read_csv("C:\\Users\\saila\\OneDrive\\Documents\\Downloads\\Zomato-data-.csv")
print(dataframe.head())
```

|   | name                  | online_order | book_table | rate  | votes | \ |
|---|-----------------------|--------------|------------|-------|-------|---|
| 0 | Jalaa                 | 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 [257]_ 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 | Jalaa                 | Yes          | Yes        | 4.1  | 775   |   |
| 1 | Spice Elephant        | Yes          | No         | 4.1  | 787   |   |
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| 1 | 800                         | Buffet          |
| 2 | 800                         | Buffet          |
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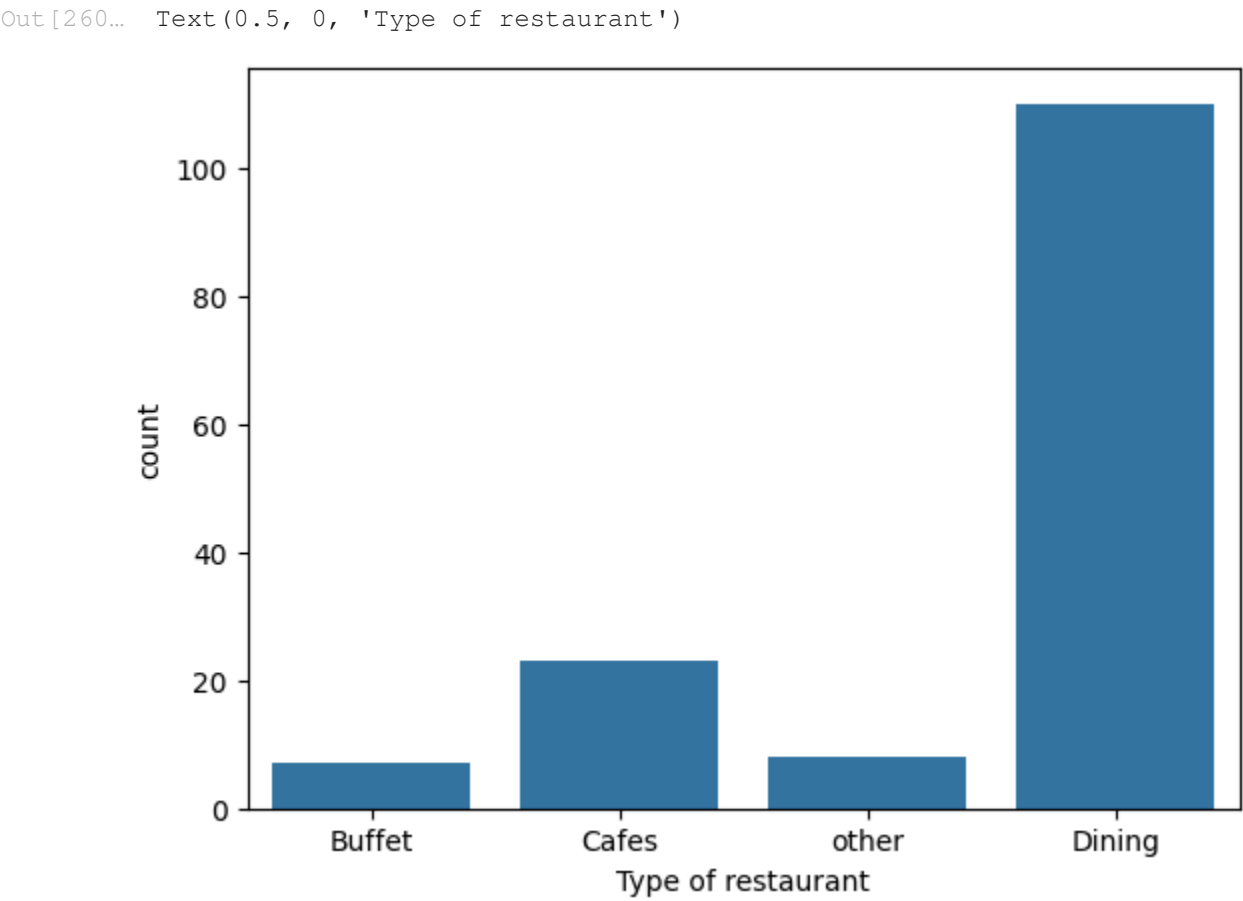
```
In [258]_ print(dataframe.isnull().sum())

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

In [259]_ 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
```

```
In [260]_ sns.countplot(x=dataframe['listed_in(type)'])
plt.xlabel('Type of restaurant')
```

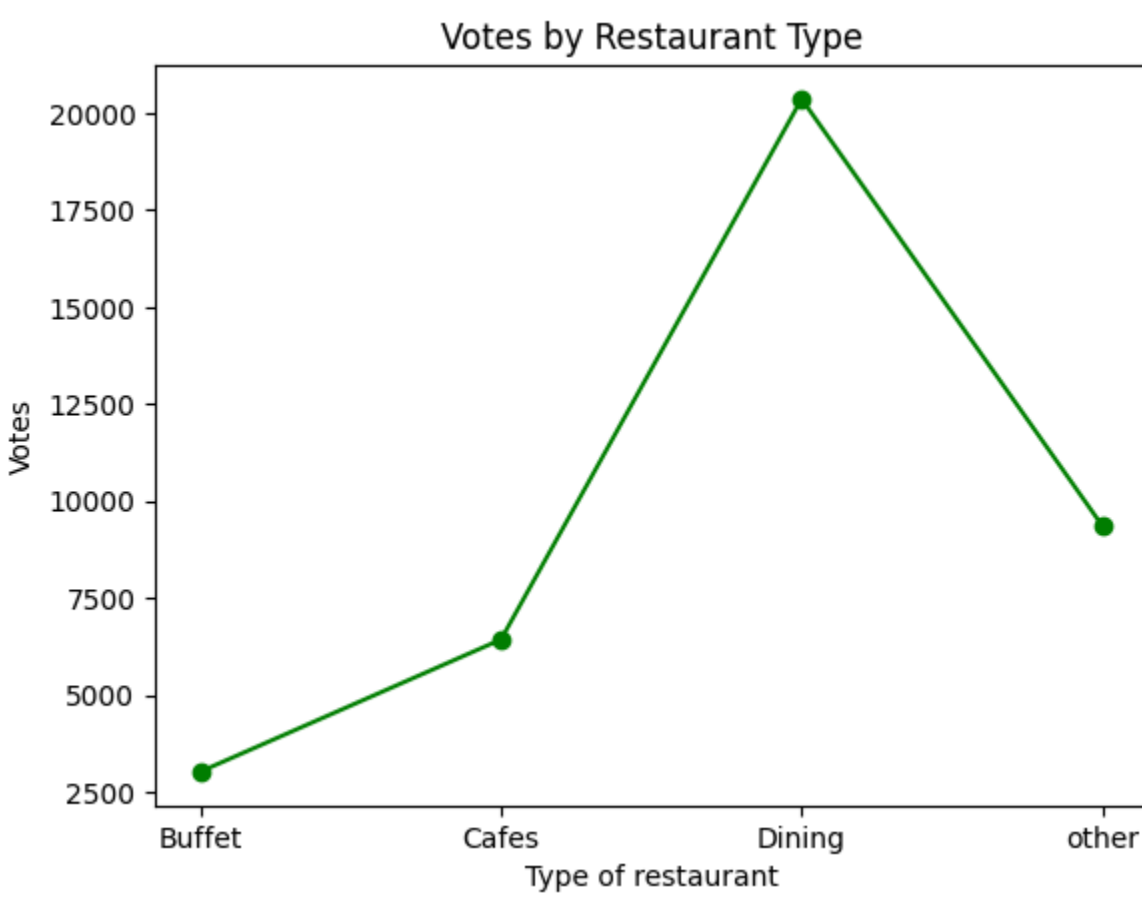


```
In [261]_ import pandas as pd
import matplotlib.pyplot as plt

# Grouping by 'listed_in(type)' and summing votes
grouped_data = dataframe.groupby('listed_in(type)')['votes'].sum()

# Convert to DataFrame (optional)
result = pd.DataFrame({'votes': grouped_data})

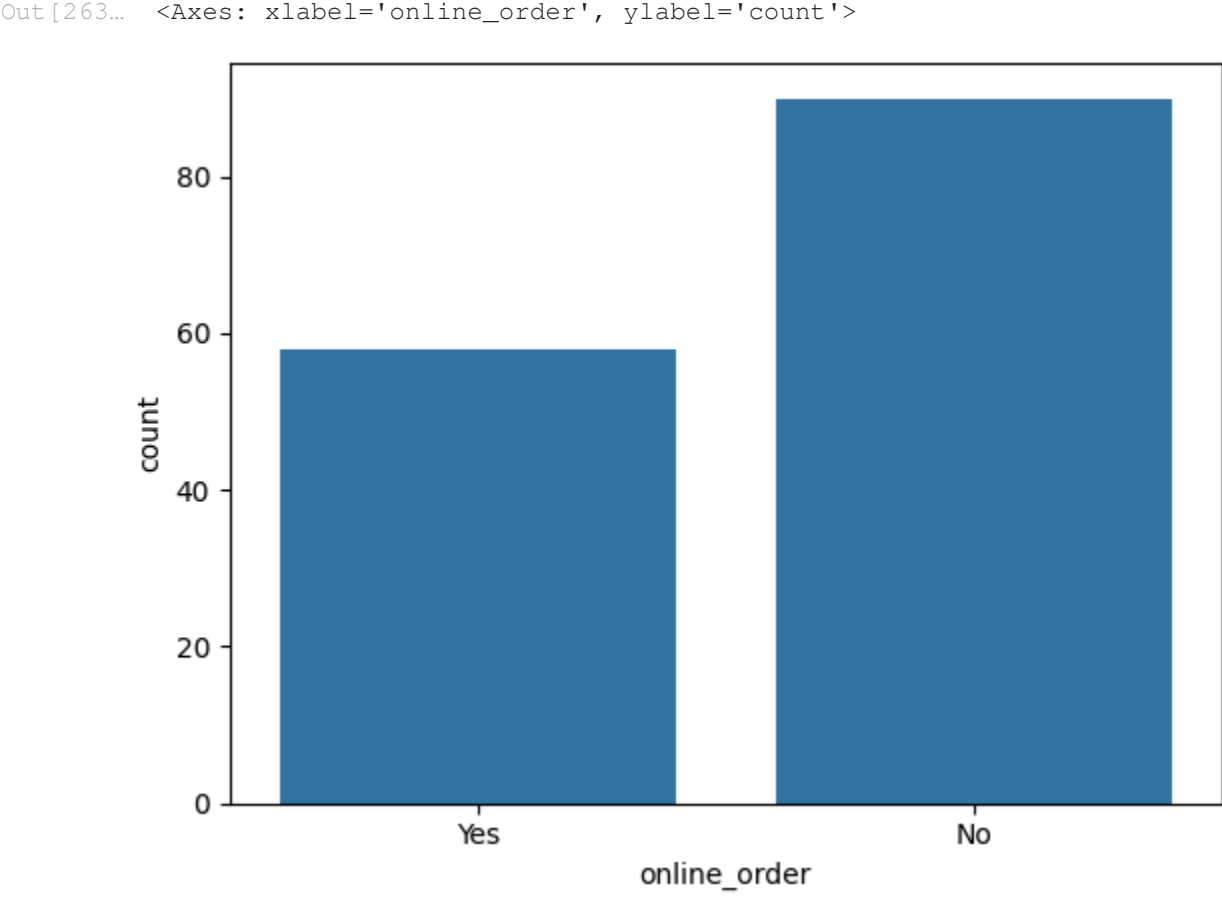
# Plot with index as x-axis
plt.plot(result.index, result['votes'], c='green', marker='o')
plt.xlabel('Type of restaurant')
plt.ylabel('Votes')
plt.title('Votes by Restaurant Type')
plt.show()
```



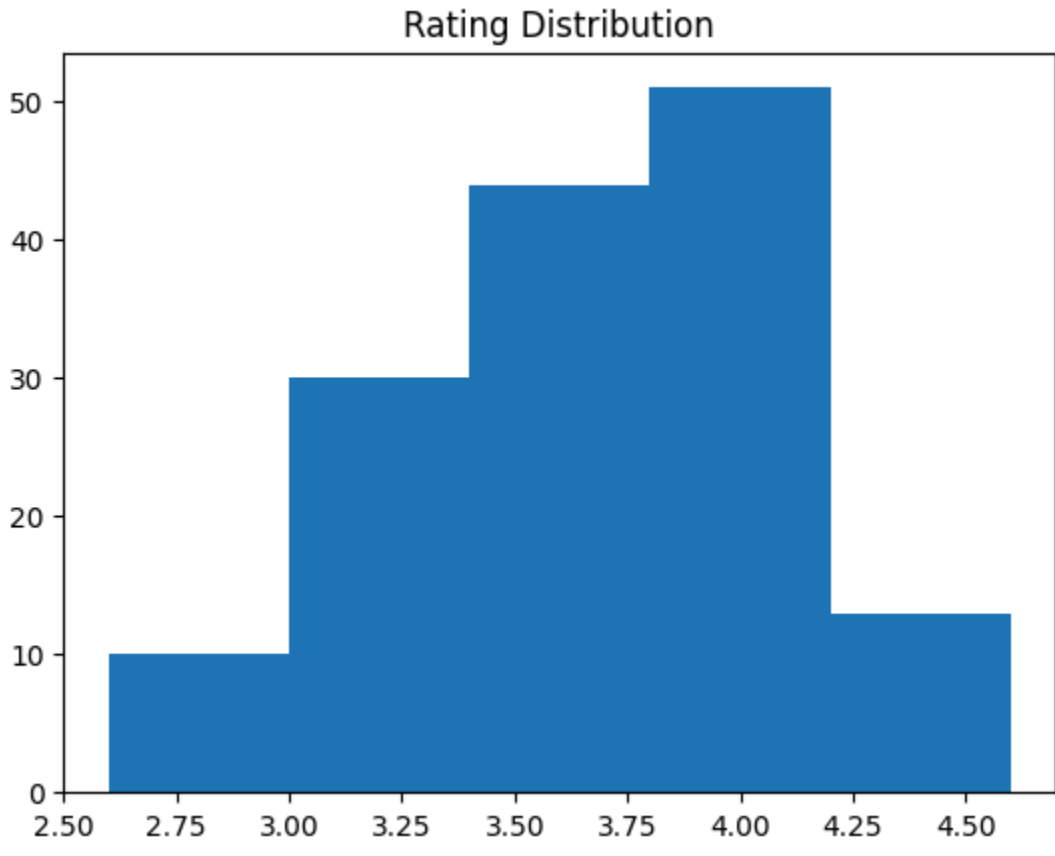
```
In [262]_ max_votes = dataframe['votes'].max()
restaurant_with_max_votes = dataframe.loc[dataframe['votes']==max_votes,'name']
print('Restaurant(s) with the maximum votes:')
print(restaurant_with_max_votes)

Restaurant(s) with the maximum votes:
38    Empire Restaurant
Name: name, dtype: object
```

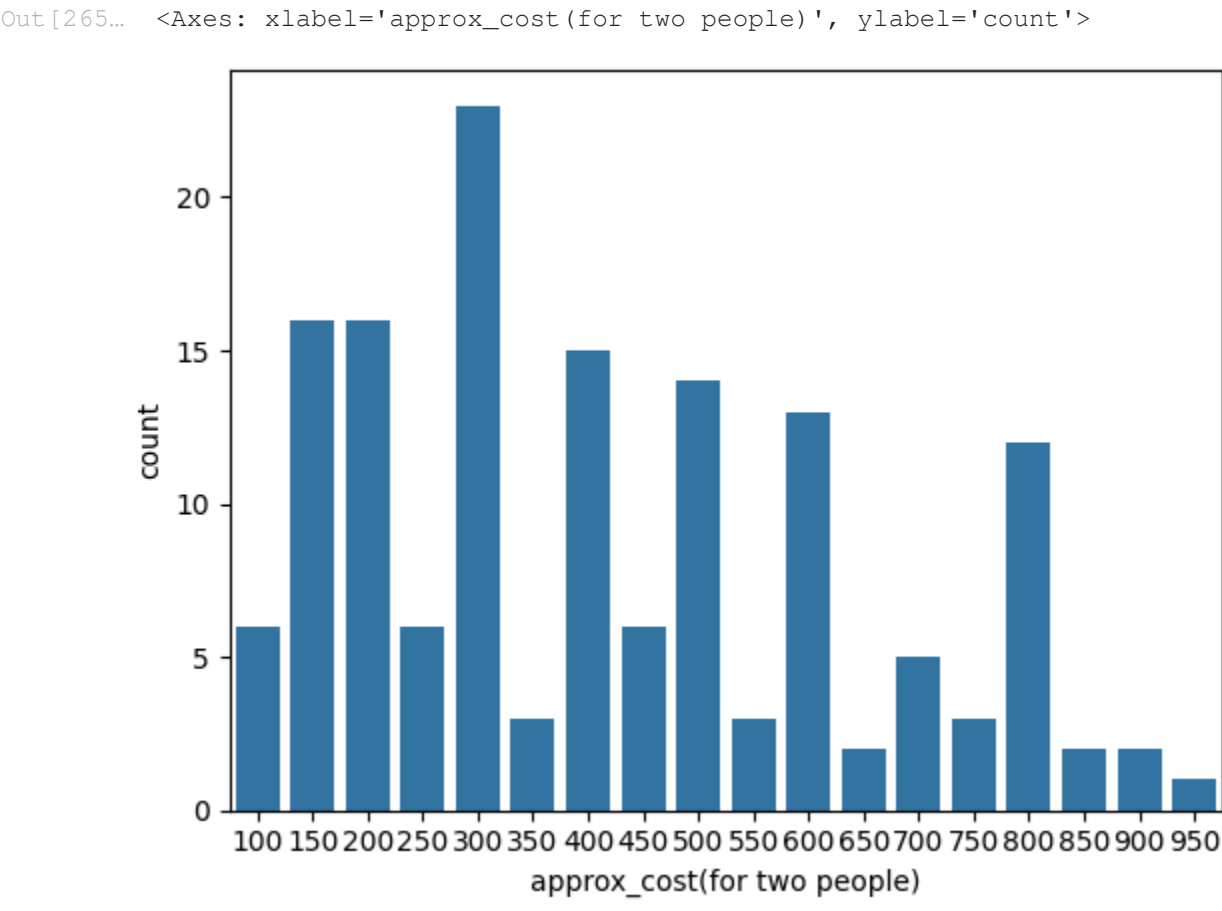
```
In [263]_ sns.countplot(x=dataframe['online_order'])
```



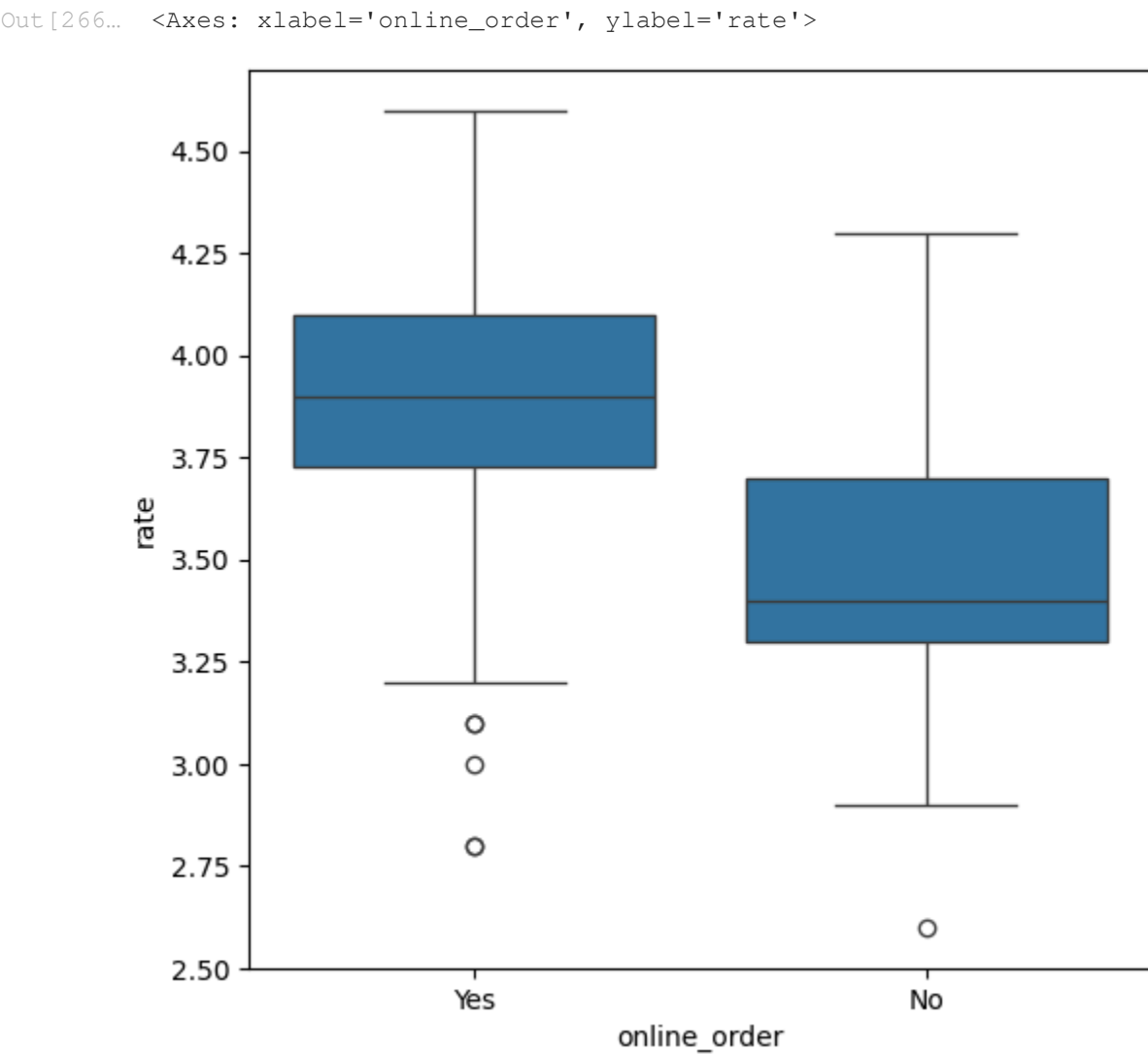
```
In [264]_ plt.hist(dataframe['rate'],bins=5)
plt.title('Rating Distribution')
plt.show()
```



```
In [265]_ couple_data = dataframe['approx_cost(for two people)']
sns.countplot(x=couple_data)
```



```
In [266]_ plt.figure(figsize=(6,6))
sns.boxplot(x='online_order',y='rate',data = dataframe)
```



```
In [267]_ 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()
```

