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

In [ ]:

In [3]:
```
df = pd.read_csv('Zomato_data.csv')
print(df.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 [5]:
```
def handleRate(value):
    value = str(value).split('/')
    value = value[0];
    return float(value)
df['rate']=df['rate'].apply(handleRate)
print(df.head())
```

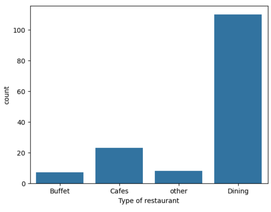
```
                   name online_order book_table  rate  votes  \
0                 Jalsa          Yes         Yes   4.1    775
1        Spice Elephant          Yes          No   4.1    787
2       San Churro Cafe          Yes          No   3.8    918
3  Addhuri Udupi Bhojana           No          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 [7]:
```
null = df.isnull().sum()
print(null)
```

```
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 [13]:
```
sns.countplot(x=df['listed_in(type)'])
plt.xlabel("Type of restaurant")
```

Out[13]:
```
Text(0.5, 0, 'Type of restaurant')
```

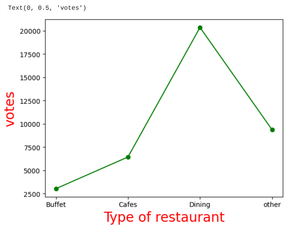


In [14]:
```
group_data = df.groupby('listed_in(type)')['votes'].sum()
print(group_data)
```

```
listed_in(type)
Buffet     3028
Cafes      6434
Dining    20363
other      9367
Name: votes, dtype: int64
```

In [17]:
```
result = pd.DataFrame({'votes':group_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[17]:
```
Text(0, 0.5, 'votes')
```



In [19]:
```
max_votes = df['votes'].max()
print(max_votes)
```

```
4884
```

In [23]:
```
restaurant_with_max_votes = df.loc[df['votes']==max_votes, 'name']
print("Restaurant with maximum votes")
print(restaurant_with_max_votes)
```

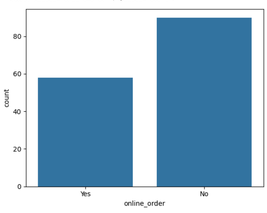
```
Restaurant with maximum votes
38    Empire Restaurant
Name: name, dtype: object
```

In [24]:
```
df.columns
```

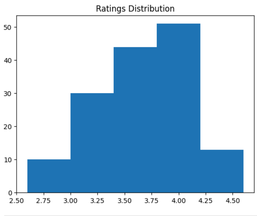
Out[24]:
```
Index(['name', 'online_order', 'book_table', 'rate', 'votes',
       'approx_cost(for two people)', 'listed_in(type)'],
      dtype='object')
```

In [26]:
```
sns.countplot(x=df['online_order'])
```

Out[26]:
```
<Axes: xlabel='online_order', ylabel='count'>
```

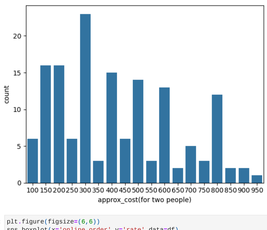


In [27]:
```
plt.hist(df['rate'], bins=5)
plt.title("Ratings Distribution")
plt.show()
```



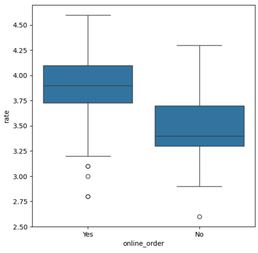
In [28]:
```
couple_data = df['approx_cost(for two people)']
sns.countplot(x=couple_data)
```

Out[28]:
```
<Axes: xlabel='approx_cost(for two people)', ylabel='count'>
```

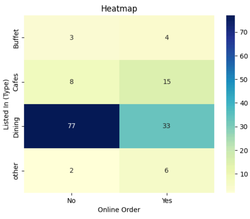


In [29]:
```
plt.figure(figsize=(6,6))
sns.boxplot(x='online_order',y='rate',data=df)
```

Out[29]:
```
<Axes: xlabel='online_order', ylabel='rate'>
```



In [31]:
```
pivot = df.pivot_table(index='listed_in(type)', columns='online_order', aggfunc='size', fill_value=0)
sns.heatmap(pivot, annot=True, cmap="YlGnBu", fmt='d')
plt.title("Heatmap")
plt.xlabel("Online Order")
plt.ylabel("Listed In (Type)")
plt.show()
```


Heatmap
Buffet
Cafes
Dining
other
Listed In (Type)
3
4
8
15
77
33
2
6
No
Yes
Online Order
70
60
50
40
30
20
10

In [ ]: