In [4]:
```
#import libraries
import pandas as pd #for data analysis
import numpy as np #for numerical operations
import matplotlib.pyplot as plt # for data visualisation
import seaborn as sns
```

In [7]:
```
#create data frames to read the csv file in jupyter notebook
dataframe = pd.read_csv("zomato data .csv")
```

In [8]:
```
dataframe
```

Out[8]:

	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 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

In [9]:
```
#cleaning the data - col rate
def RateChange(value):
    value=str(value).split('/')
    value=value[0];
    return float(value)
dataframe['rate']=dataframe['rate'].apply(RateChange)
print(dataframe.head())
```

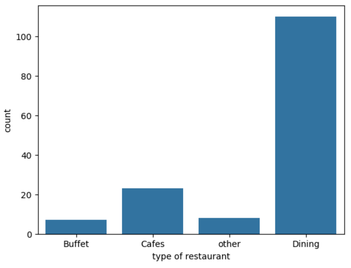
```
                   name online_order book_table  rate  votes  \
0                 Jalsa          Yes        Yes   4.1    775
1        Spice Elephant          Yes         No   4.1    787
2       San Churro Cafe          Yes         No   3.8    918
3  Addhuri Udupi Bhojana           No         No   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 [10]:
```
#checking summary to see any  null value
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 [11]:
```
#Which type of restaurant do most customers typically order from?
sns.countplot(x=dataframe['listed_in(type)'])
plt.xlabel("type of restaurant")
```

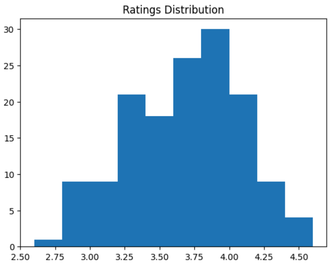
Out[11]:
```
Text(0.5, 0, 'type of restaurant')
```



In [18]:
```
#which type of restaurant has more number of votes
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="orange", size=24)
plt.ylabel("votes", c="orange", size= 24)
```

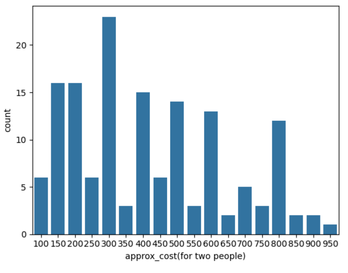
Out[18]:
```
Text(0, 0.5, 'votes')
```

In [19]:
```
#What are the ratings that most restaurants have earned
plt.hist(dataframe['rate'], bins= 10)
plt.title("Ratings Distribution")
plt.show()
```



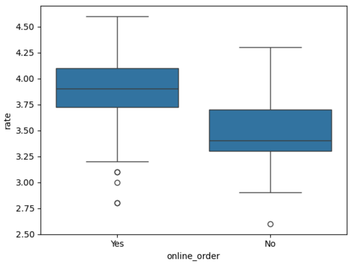
In [20]:
```
#what is the average cost spending of two people
couple_data=dataframe['approx_cost(for two people)']
sns.countplot(x=couple_data)
```

Out[20]:
```
<Axes: xlabel='approx_cost(for two people)', ylabel='count'>
```



In [23]:
```
#which mode receives maximum rating
sns.boxplot(x = 'online_order', y = 'rate', data = dataframe)
```

Out[23]:
```
<Axes: xlabel='online_order', ylabel='rate'>
```



In [ ]: