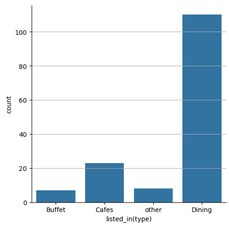
Project - Insights and Findings

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

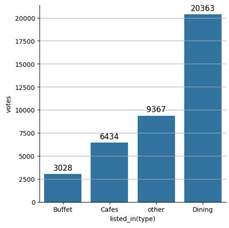
```
In [17]: sns.catplot(x="listed_in(type)",kind="count",data=df)
         plt.grid(axis="y")
         plt.show()
```



Majority of customers order from Dining type restaurants

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

```
In [25]: g = sns.catplot(x="listed_in(type)",y="votes",kind="bar",data=df,estimator=np.sum,errorbar=None)
         plt.grid(axis="y")

         # Add labels on top of bars
         ax = g.ax  # Get the axes from the FacetGrid
         for container in ax.containers:
             ax.bar_label(container, fmt='%.0f', label_type="edge", fontsize=12, color='black', padding=3)

         plt.show()
```



Dining type restaurants have received 20363 votings

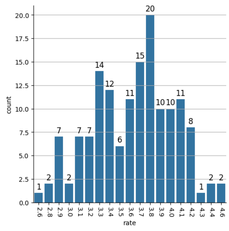
Other type restaurants have received 9367 votings

Cafes type restaurants have received 6434 votings

Buffet type restaurants have received 3028 votings

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

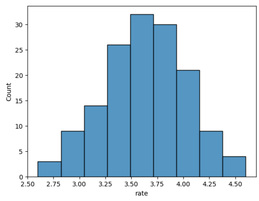
```
In [31]: # Create the catplot
         g = sns.catplot(x="rate", kind="count", data=df)

         # Add labels on top of bars
         ax = g.ax  # Get the axes from the FacetGrid
         for container in ax.containers:
             ax.bar_label(container, fmt='%.0f', label_type="edge", fontsize=12, color='black', padding=3)

         # Rotate x-ticks, add grid, and show the plot
         plt.xticks(rotation=270)
         plt.grid(axis="y")
         plt.show()
```



Majority of restaurants have recieved 3.8 rating

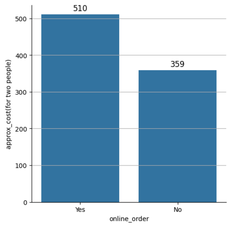
```
In [32]: sns.histplot(df.loc[:,"rate"])
```

```
Out[32]: <Axes: xlabel='rate', ylabel='Count'>
```



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

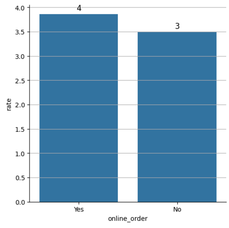
```
In [39]: g = sns.catplot(x="online_order",y="approx_cost(for two people)",kind="bar",data=df,estimator=np.mean,errorbar=None)
         plt.grid(axis="y")

         # Add labels on top of bars
         ax = g.ax  # Get the axes from the FacetGrid
         for container in ax.containers:
             ax.bar_label(container, fmt='%.0f', label_type="edge", fontsize=12, color='black', padding=3)

         plt.show()
```



On an average couple order 510 Rs of food

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

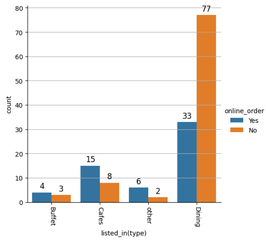
```
In [40]: g = sns.catplot(x="online_order",y="rate",kind="bar",data=df,estimator=np.mean,errorbar=None)
         plt.grid(axis="y")

         # Add labels on top of bars
         ax = g.ax  # Get the axes from the FacetGrid
         for container in ax.containers:
             ax.bar_label(container, fmt='%.0f', label_type="edge", fontsize=12, color='black', padding=3)

         plt.show()
```



Online order on an average has received rating of 4 star rating where as offline order has received poor rating of 3 stars

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

```
In [42]: # Create the catplot
         g = sns.catplot(x="listed_in(type)", kind="count", data=df, hue="online_order")

         # Add labels on top of bars
         ax = g.ax  # Get the axes from the FacetGrid
         for container in ax.containers:
             ax.bar_label(container, fmt='%.0f', label_type="edge", fontsize=12, color='black', padding=3)

         # Rotate x-ticks, add grid, and show the plot
         plt.xticks(rotation=270)
         plt.grid(axis="y")
         plt.show()
```



Dining type has received more offline orders

END