

Task 1

Task: Restaurant Ratings

Analyze the distribution of aggregate ratings and determine the most common rating range

```
In [1]: # import library
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sb
```

```
In [2]: df=pd.read_csv("C:\\Users\\abhis\\Downloads\\Dataset .csv")
df
```

Out[2]:

	Restaurant ID	Restaurant Name	Country Code	City	Address	Locality	Locality Verbose
0	6317637	Le Petit Souffle	162	Makati City	Third Floor, Century City Mall, Kalayaan Avenu...	Century City Mall, Poblacion, Makati City	Century City Mall, Poblacion Makati City Mak..
1	6304287	Izakaya Kikufuji	162	Makati City	Little Tokyo, 2277 Chino Roces Avenue, Legaspi...	Little Tokyo, Legaspi Village, Makati City	Little Tokyo Legaspi Village Makati City Ma..
2	6300002	Heat - Edsa Shangri-La	162	Mandaluyong City	Edsa Shangri-La, 1 Garden Way, Ortigas, Mandal...	Edsa Shangri-La, Ortigas, Mandaluyong City	Edsa Shangri-La Ortigas Mandaluyong City, Ma..
3	6318506	Ooma	162	Mandaluyong City	Third Floor, Mega Fashion Hall, SM Megamall, O...	SM Megamall, Ortigas, Mandaluyong City	SM Megamall Ortigas Mandaluyong City, Mandal..
4	6314302	Sambo Kojin	162	Mandaluyong City	Third Floor, Mega Atrium, SM Megamall, Ortigas...	SM Megamall, Ortigas, Mandaluyong City	SM Megamall Ortigas Mandaluyong City, Mandal..
...
9546	5915730	Namlı Gurme	208	İstanbul	Kemankeş Karamustafa Paşa Mahallesi, Rıhtım ...	Karaköy	Karaköy İstanbul
9547	5908749	Ceviz Aca	208	İstanbul	Koşuyolu Mahallesi, Muhittin İstiklal Caddesi	Koşuyolu	Koşuyolu İstanbul
9548	5915807	Huqqa	208	İstanbul	Kuruçeşme Mahallesi, Muallim Naci Caddesi, N...	Kuruçeşme	Kuruçeşme İstanbul
9549	5916112	Ak Kahve	208	İstanbul	Kuruçeşme Mahallesi, Muallim Naci Caddesi, N...	Kuruçeşme	Kuruçeşme İstanbul
9550	5927402	Walter's Coffee Roastery	208	İstanbul	Cafea Mahallesi, Bademaltı Sokak, No 21/B, ...	Moda	Moda İstanbul

9551 rows × 21 columns

```
In [3]: df.isnull().sum()
```

```
Out[3]: Restaurant ID      0
Restaurant Name      0
Country Code      0
City      0
Address      0
Locality      0
Locality Verbose      0
Longitude      0
Latitude      0
Cuisines      9
Average Cost for two      0
Currency      0
Has Table booking      0
Has Online delivery      0
Is delivering now      0
Switch to order menu      0
Price range      0
Aggregate rating      0
Rating color      0
Rating text      0
Votes      0
dtype: int64
```

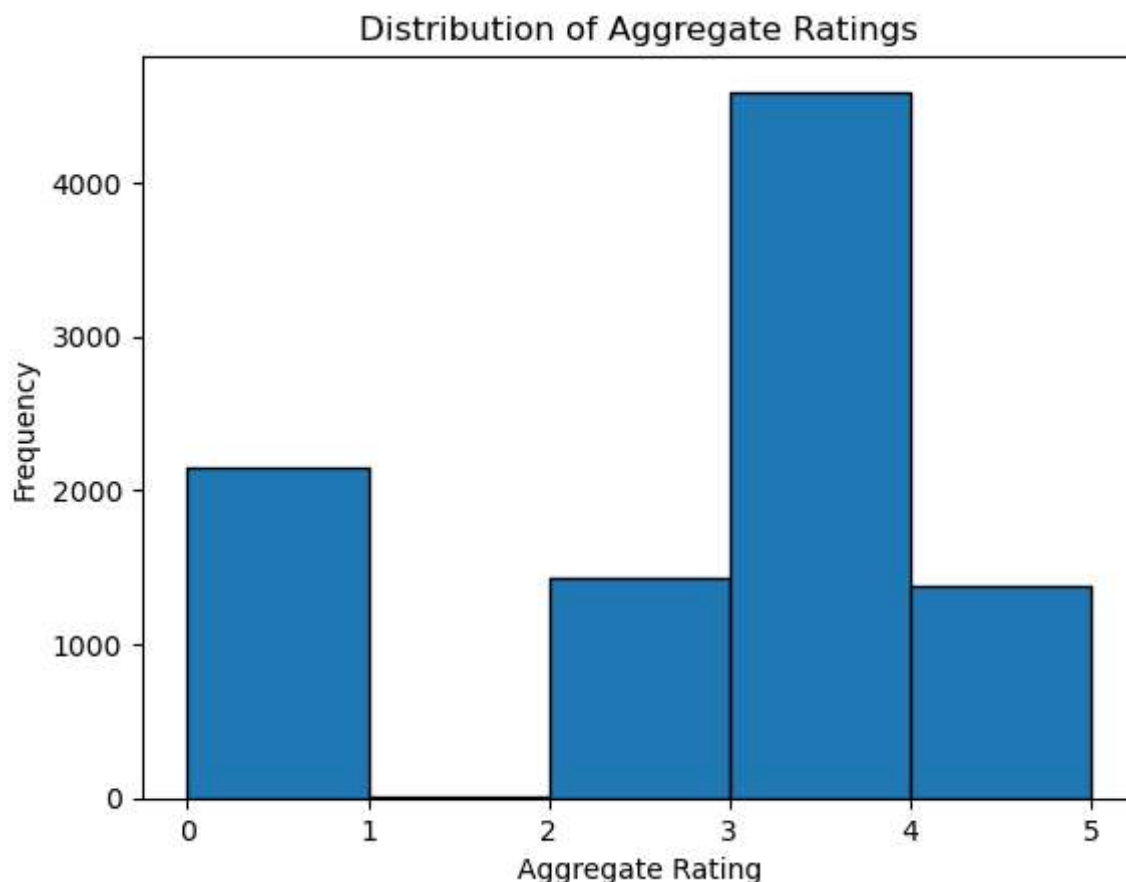
```
In [25]: agg=df['Aggregate rating']
agg
```

```
Out[25]: 0      4.8
1      4.5
2      4.4
3      4.9
4      4.8
...
9546    4.1
9547    4.2
9548    3.7
9549    4.0
9550    4.0
Name: Aggregate rating, Length: 9551, dtype: float64
```

```
In [45]: agg.value_counts().head(1)
```

```
Out[45]: 0.0      2148
Name: Aggregate rating, dtype: int64
```

```
In [43]: plt.hist(x=agg,edgecolor='k',bins=[0,1,2,3,4,5])
plt.xticks(range(0,6,1))
plt.xlabel('Aggregate Rating')
plt.ylabel('Frequency')
plt.title('Distribution of Aggregate Ratings')
plt.show()
```



Calculate the average number of votes received by restaurants.

```
In [41]: df.Votes.mean()
```

```
Out[41]: 156.909747670401
```

```
In [42]: votes_rest=df.groupby(by='Votes')['Restaurant Name'].sum()
votes_rest
```

```
Out[42]: Votes
0      Cantinho da GulaThe ChaiwalasFusion Food Corne...
1      Quiosque Chopp BrahmaNosh MahalAggarwal Sweet ...
2      Sandubas Caf  Divino Fog  oSuper GrillFrick's ...
3      Los AgavesKashyap Vaishno DhabaTotal Food Cour...
4      Desire FoodsSnax PointsCafe And MoreBaskin Rob...

...
6907      AB's - Absolute Barbecues
7574      Peter Cat
7931      Hauz Khas Social
9667      Truffles
10934     Toit
Name: Restaurant Name, Length: 1012, dtype: object
```

```
In [ ]:
```