```python
import pandas as pd
df = pd.read_csv("Dataset .csv")
df.head()
import matplotlib.pyplot as plt
import seaborn as sns
plt.figure(figsize=(12,6))
city_counts = df['City'].value_counts().head(10)
sns.barplot(x=city_counts.values, y=city_counts.index, palette='viridis')
plt.title("Top 10 Cities by Number of Restaurants")
plt.xlabel("Number of Restaurants")
plt.ylabel("City")
plt.show()
avg_rating_city = df.groupby('City')['Aggregate rating'].mean().sort_values(ascending=False).head(10)
plt.figure(figsize=(12,6))
sns.barplot(x=avg_rating_city.values, y=avg_rating_city.index, palette='coolwarm')
plt.title("Top 10 Cities with Highest Average Ratings")
plt.xlabel("Average Rating")
plt.ylabel("City")
plt.show()
!pip install folium
import folium
map = folium.Map(location=[20.5937, 78.9629], zoom_start=4)
for i in range(100):
    folium.Marker([df['Latitude'][i], df['Longitude'][i]],
                  popup=df['City'][i]).add_to(map)

map
plt.figure(figsize=(10,6))
sns.heatmap(df[['Aggregate rating', 'Votes', 'Average Cost for two', 'Price range']].corr(), annot=True, cmap='YlGnBu')
plt.title("Correlation Heatmap")
plt.show()
```
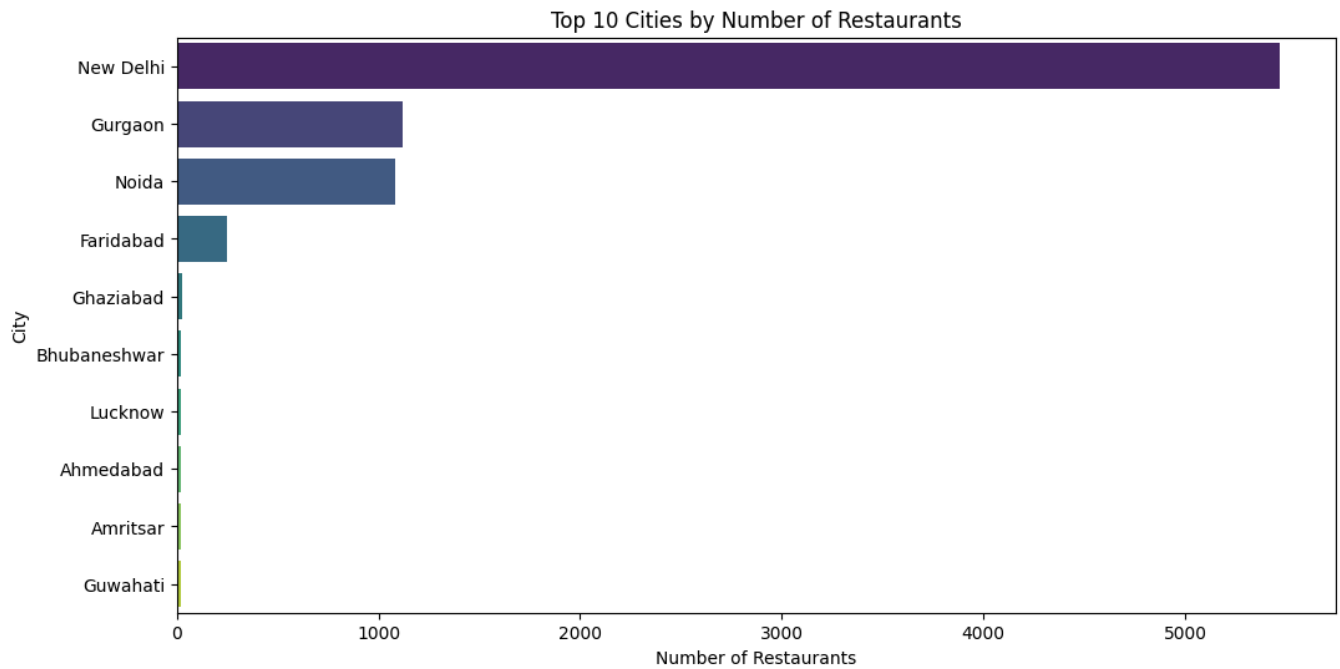
/tmp/ipython-input-5-3372033187.py:8: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `y` variable to `hue` and set `le

```
  sns.barplot(x=city_counts.values, y=city_counts.index, palette='viridis')
```

Top 10 Cities by Number of Restaurants

New Delhi, Gurgaon, Noida, Faridabad, Ghaziabad, Bhubaneshwar, Lucknow, Ahmedabad, Amritsar, Guwahati — Number of Restaurants (0 to 5000+)

/tmp/ipython-input-5-3372033187.py:15: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `y` variable to `hue` and set `le
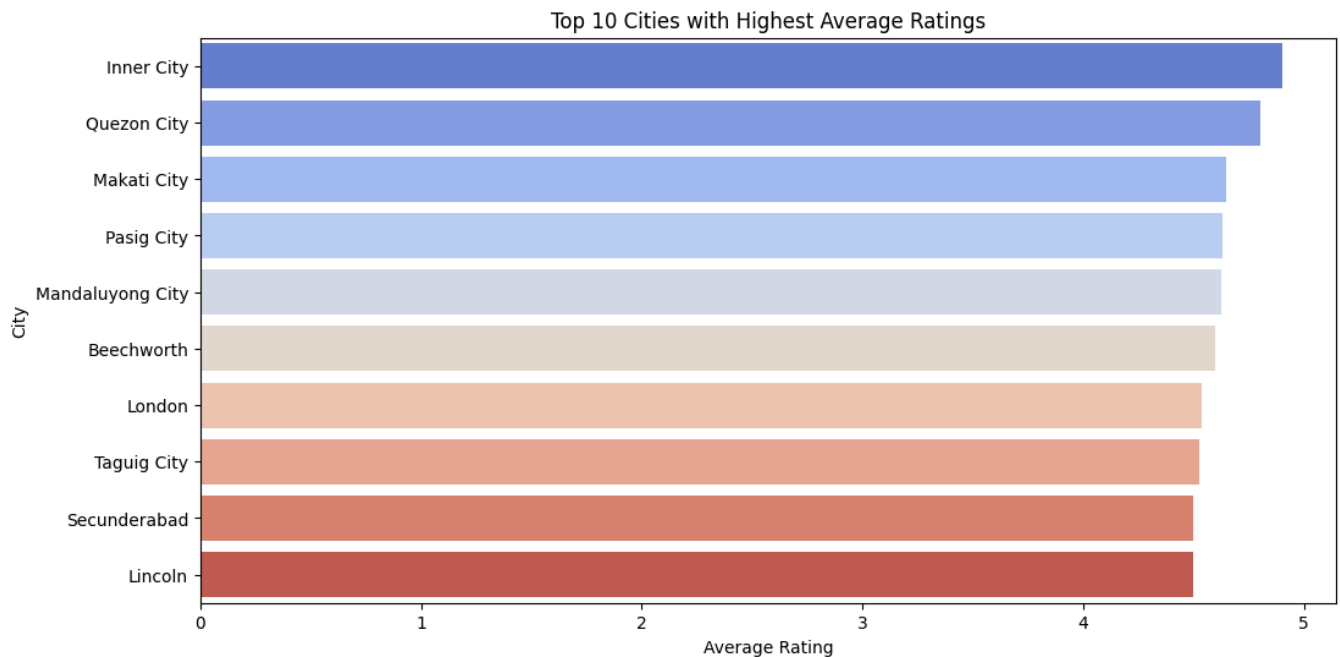
```
  sns.barplot(x=avg_rating_city.values, y=avg_rating_city.index, palette='coolwarm')
```

Top 10 Cities with Highest Average Ratings

Inner City, Quezon City, Makati City, Pasig City, Mandaluyong City, Beechworth, London, Taguig City, Secunderabad, Lincoln — Average Rating (0 to 5)

```
Requirement already satisfied: folium in /usr/local/lib/python3.11/dist-packages (0.19.7)
Requirement already satisfied: branca>=0.6.0 in /usr/local/lib/python3.11/dist-packages (from folium) (0.8.1)
Requirement already satisfied: jinja2>=2.9 in /usr/local/lib/python3.11/dist-packages (from folium) (3.1.6)
Requirement already satisfied: numpy in /usr/local/lib/python3.11/dist-packages (from folium) (2.0.2)
Requirement already satisfied: requests in /usr/local/lib/python3.11/dist-packages (from folium) (2.32.3)
Requirement already satisfied: xyzservices in /usr/local/lib/python3.11/dist-packages (from folium) (2025.4.0)
Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.11/dist-packages (from jinja2>=2.9->folium) (3.0.2)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests->folium) (3.4.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests->folium) (3.10)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests->folium) (2.4.0)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests->folium) (2025.6.15)
```

Correlation Heatmap

egate rating: 1, 0.31, 0.052, 0.44