

## Importing libraries

```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import folium
```

## Loading Data

```
df=pd.read_csv("/content/Dataset .csv")
df.head()
```



	Restaurant ID	Restaurant Name	Country Code	City	Address	Locality	Locality Verbose	Longitude	Latitude	Cuisines	...	Currency
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...	121.027535	14.565443	French, Japanese, Desserts	...	Botswana Pula(P)
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...	121.014101	14.553708	Japanese	...	Botswana Pula(P)
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...	121.056831	14.581404	Seafood, Asian, Filipino, Indian	...	Botswana Pula(P)
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...	121.056475	14.585318	Japanese, Sushi	...	Botswana Pula(P)
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...	121.057508	14.584450	Japanese, Korean	...	Botswana Pula(P)

5 rows × 21 columns

```
df[['Latitude', 'Longitude']] = df[['Latitude', 'Longitude']].fillna(method='ffill')
df = df.dropna(subset=['City'])
```



```
<ipython-input-5-9c4d0a83adb1>:1: FutureWarning: DataFrame.fillna with 'method' is deprecated and will raise in a future version. Use df[['Latitude', 'Longitude']] = df[['Latitude', 'Longitude']].fillna(method='ffill')
```

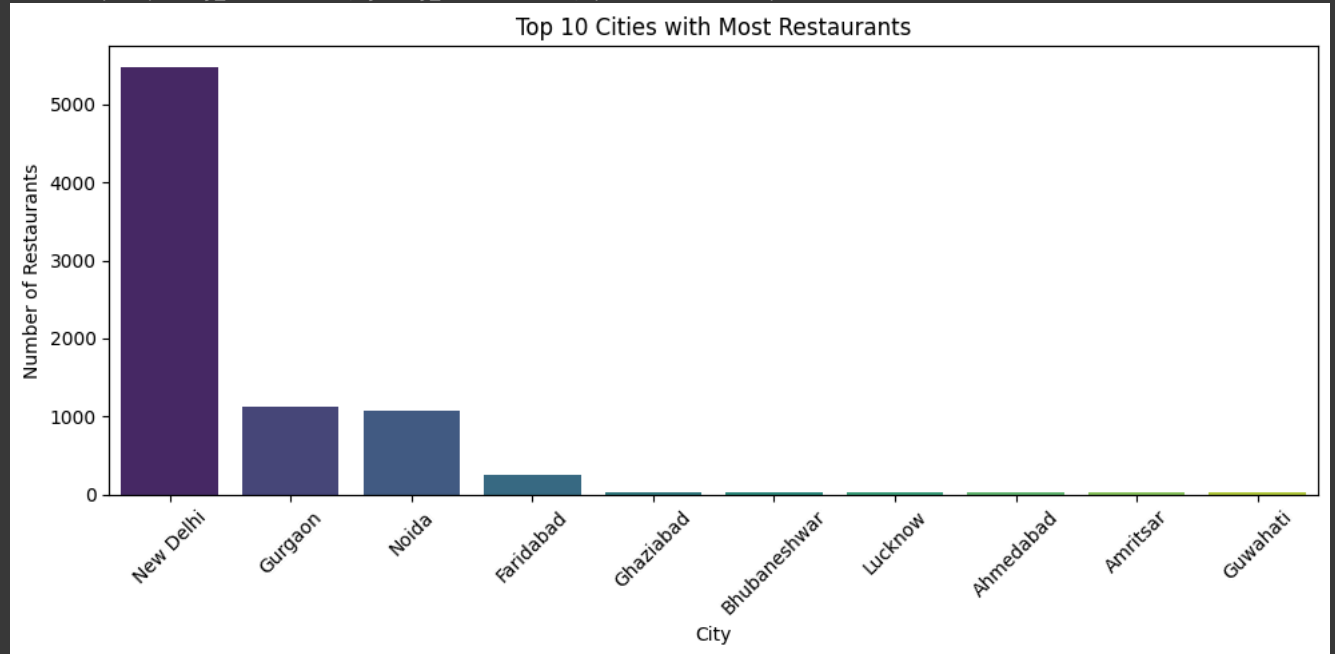
```
map_center = [df['Latitude'].mean(), df['Longitude'].mean()]
restaurant_map = folium.Map(location=map_center, zoom_start=5)
for i, row in df.iterrows():
    folium.CircleMarker(
        location=[row['Latitude'], row['Longitude']],
        radius=2,
        popup=row['Restaurant Name'],
        color='blue',
        fill=True
    ).add_to(restaurant_map)
restaurant_map.save("restaurant_map.html")
```

```
city_counts = df['City'].value_counts().head(10)
plt.figure(figsize=(10, 5))
sns.barplot(x=city_counts.index, y=city_counts.values, palette='viridis')
plt.title('Top 10 Cities with Most Restaurants')
plt.ylabel('Number of Restaurants')
plt.xticks(rotation=45)
plt.tight_layout()
plt.show()
```

 <ipython-input-7-c1454f052a75>:3: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and set `legend=False`.

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



```
city_avg_rating = df.groupby('City')['Aggregate rating'].mean().sort_values(ascending=False).head(10)
plt.figure(figsize=(10, 5))
sns.barplot(x=city_avg_rating.index, y=city_avg_rating.values, palette='coolwarm')
plt.title('Top 10 Cities by Average Restaurant Rating')
plt.ylabel('Average Rating')
plt.xticks(rotation=45)
plt.tight_layout()
plt.show()
```

```
<ipython-input-8-739d08222c65>:3: FutureWarning:  
Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and set `legend=False`.  
sns.barplot(x=city_avg_rating.index, y=city_avg_rating.values, palette='coolwarm')
```

