In [1]:
```
"""LEVEL 1 - TASK 02"""

'''Task: Descriptive Analysis

-->Calculate basic statistical measures (mean,
median, standard deviation, etc.) for numerical
columns.

-->Explore the distribution of categorical
variables like "Country Code","City",and
"Cuisines".

-->Identify the top cuisines and cities with the
highest number of restaurants.'''
```

In [ ]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sb
```

In [4]:
```
data = pd.read_csv("Dataset.csv")
data.head()
```

Out[4]:

	Restaurant ID	Restaurant Name	Country Code	City	Address	Locality	Locality Verbose	Longitu
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...	121.0275
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...	121.0141
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...	121.0568
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...	121.0564
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...	121.0575

5 rows × 21 columns

In [5]:
```
data.describe()
```

Out[5]:

	Restaurant ID	Country Code	Longitude	Latitude	Average Cost for two	Price range	Aggreg rat
count	9.551000e+03	9551.000000	9551.000000	9551.000000	9551.000000	9551.000000	9551.000
mean	9.051128e+06	18.365616	64.126574	25.854381	1199.210763	1.804837	2.666
std	8.791521e+06	56.750546	41.467058	11.007935	16121.183073	0.905609	1.516
min	5.300000e+01	1.000000	-157.948486	-41.330428	0.000000	1.000000	0.000
25%	3.019625e+05	1.000000	77.081343	28.478713	250.000000	1.000000	2.500
50%	6.004089e+06	1.000000	77.191964	28.570469	400.000000	2.000000	3.200
75%	1.835229e+07	1.000000	77.282006	28.642758	700.000000	2.000000	3.700
max	1.850065e+07	216.000000	174.832089	55.976980	800000.000000	4.000000	4.900

In [ ]:
```
#let X --> country code , Y --> City , Z--> Cuisines
```

In [8]:
```
#Explorating distribution of  country code
X = data["Country Code"].value_counts()
X
```

Out[8]:
```
1      8652
216     434
215      80
30       60
214      60
189      60
148      40
208      34
14       24
162      22
94       21
184      20
166      20
191      20
37        4
Name: Country Code, dtype: int64
```

In [10]:
```
#Explorating distribution of city
Y = data["City"].value_counts()
Y
```

Out[10]:
```
New Delhi           5473
Gurgaon             1118
Noida               1080
Faridabad            251
Ghaziabad             25
                    ...
Panchkula              1
Mc Millan              1
Mayfield               1
Macedon                1
Vineland Station       1
Name: City, Length: 141, dtype: int64
```

In [11]:
```
#Explorating distribution of cuisines
Z = data["Cuisines"].value_counts()
Z
```

Out[11]:
```
North Indian                                            936
North Indian, Chinese                                   511
Chinese                                                 354
Fast Food                                               354
North Indian, Mughlai                                   334
                                                       ...
Bengali, Fast Food                                        1
North Indian, Rajasthani, Asian                           1
Chinese, Thai, Malaysian, Indonesian                      1
Bakery, Desserts, North Indian, Bengali, South Indian     1
Italian, World Cuisine                                    1
Name: Cuisines, Length: 1825, dtype: int64
```

In [12]:
```
#Top cuisines with highest number of restaurants
Z.head(10)
```

Out[12]:
```
North Indian                    936
North Indian, Chinese           511
Chinese                         354
Fast Food                       354
North Indian, Mughlai           334
Cafe                            299
Bakery                          218
North Indian, Mughlai, Chinese  197
Bakery, Desserts                170
Street Food                     149
Name: Cuisines, dtype: int64
```

In [13]:
```
#Top cities with highest number of restaurants
Y.head(10)
```

Out[13]:
```
New Delhi       5473
Gurgaon         1118
Noida           1080
Faridabad        251
Ghaziabad         25
Bhubaneshwar      21
Amritsar          21
Ahmedabad         21
Lucknow           21
Guwahati          21
Name: City, dtype: int64
```

In [ ]: