

Task: Cuisine Combination

2.2.1 Identify the most common combinations of cuisines in the dataset.

```
In [3]: import pandas as pd  
dt = pd.read_csv(r"C:\Users\HP\OneDrive\Documents\Cognifyz Internship Program\Dataset.cs
```

```
In [4]: dt
```

Out[4]:

	Restaurant ID	Restaurant Name	Country Code	City	Address	Locality	Locality Verbose	Longi
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...	121.02
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...	121.01
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...	121.05
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...	121.05
4	6314302	Sambo Kojin	162	Mandaluyong City	Thirđ Floor, Mega Atrium, SM Megamall, Ortigas...	SM Megamall, Ortigas, Mandaluyong City	SM Megamall, Ortigas, Mandaluyong City, Mandal...	121.05
...
9546	5915730	Namlı Gurme	208	İstanbul	Kemankeş Karamustafa Paşası Mahallesi, Rıhtım ...	Karaköy	Karaköy, İstanbul	28.97
9547	5908749	Ceviz Aca	208	İstanbul	Koşuyolu Mahallesi, Muhittin İsmet Paşa Cadd...	Koşuyolu	Koşuyolu, İstanbul	29.04
9548	5915807	Huqqa	208	İstanbul	Kuruçeşme Mahallesi, Muallim Naci Caddesi, N...	Kuruçeşme	Kuruçeşme, İstanbul	29.03
9549	5916112	Ak Kahve	208	İstanbul	Kuruçeşme Mahallesi, Muallim Naci Caddesi, N...	Kuruçeşme	Kuruçeşme, İstanbul	29.03
9550	5927402	Walter's Coffee Roastery	208	İstanbul	Cafea Mahallesi, Bademaltı Sokak, No 21/B, ...	Moda	Moda, İstanbul	29.02

9551 rows × 21 columns

```
In [16]: dt['cuisines combinations'] = dt['Cuisines']

In [17]: dt['cuisines combinations']
```

```
Out[17]: 0      French, Japanese, Desserts
1      Japanese
2      Seafood, Asian, Filipino, Indian
3      Japanese, Sushi
4      Japanese, Korean
...
9546      Turkish
9547      World Cuisine, Patisserie, Cafe
9548      Italian, World Cuisine
9549      Restaurant Cafe
9550      Cafe
Name: cuisines combinations, Length: 9551, dtype: object
```

```
In [18]: top_combos = dt['cuisines combinations'].value_counts().head(10)
```

```
In [19]: top_combos
```

```
Out[19]: 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 combinations, dtype: int64
```

```
In [20]: print('Top 10 Cuisine Combinations:')
for i, combo in enumerate(top_combos.index):
    print(f"{i+1}. {combo}")
```

```
Top 10 Cuisine Combinations:
1. North Indian
2. North Indian, Chinese
3. Chinese
4. Fast Food
5. North Indian, Mughlai
6. Cafe
7. Bakery
8. North Indian, Mughlai, Chinese
9. Bakery, Desserts
10. Street Food
```

2.2.2 Determine if certain cuisine combinations tend to have higher ratings.

```
In [22]: # get mean rating by cuisine combo

combo_rating = dt.groupby('cuisines combinations')['Aggregate rating'].mean()
```

```
In [23]: combo_rating
```

```
Out[23]: cuisines combinations
Afghani 0.725
Afghani, Mughlai, Chinese 0.000
Afghani, North Indian 0.000
Afghani, North Indian, Pakistani, Arabian 0.000
African 4.700
...
Western, Asian, Cafe 4.200
Western, Fusion, Fast Food 3.200
World Cuisine 4.900
World Cuisine, Mexican, Italian 4.400
World Cuisine, Patisserie, Cafe 4.200
Name: Aggregate rating, Length: 1825, dtype: float64
```

```
In [24]: top_combos = combo_rating.sort_values(ascending=False)
```

```
In [25]: top_combos
```

```
Out[25]: cuisines combinations
Italian, Deli 4.9
Hawaiian, Seafood 4.9
American, Sandwich, Tea 4.9
Continental, Indian 4.9
European, Asian, Indian 4.9
...
Fast Food, Desserts, Beverages 0.0
Fast Food, Chinese, Burger 0.0
Cafe, French 0.0
Seafood, Mughlai, North Indian 0.0
Fast Food, Mughlai, Armenian 0.0
Name: Aggregate rating, Length: 1825, dtype: float64
```

```
In [26]: print(top_combos.head(10))
```

```
cuisines combinations
Italian, Deli 4.9
Hawaiian, Seafood 4.9
American, Sandwich, Tea 4.9
Continental, Indian 4.9
European, Asian, Indian 4.9
European, Contemporary 4.9
European, German 4.9
BBQ, Breakfast, Southern 4.9
American, Coffee and Tea 4.9
Sunda, Indonesian 4.9
Name: Aggregate rating, dtype: float64
```

```
In [ ]:
```