The Battle of Neighborhoods

Applied Data Science Capstone

An analysis on the spread of Turkish Kebab restaurants in Milan, Italy

Business Problem:

- Identifying the spread of Turkish Kebab restaurants across the city of Milan.

- Suggesting areas with low competition to open a new restaurant.
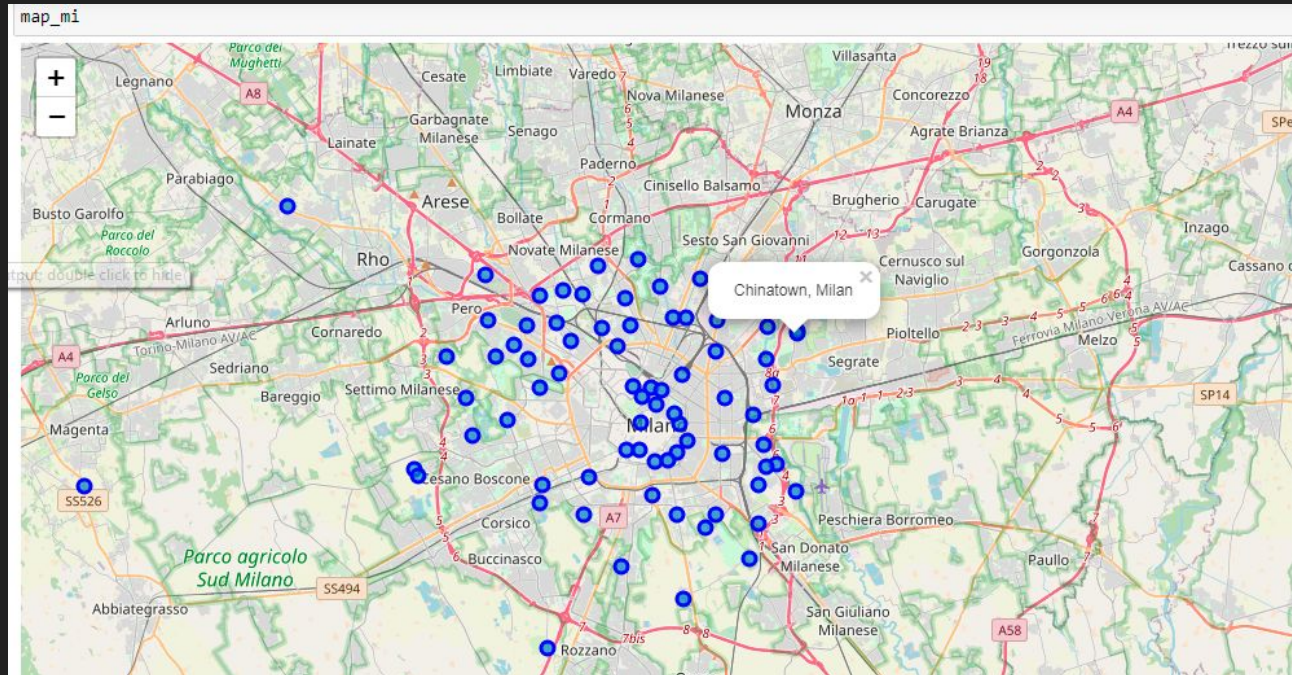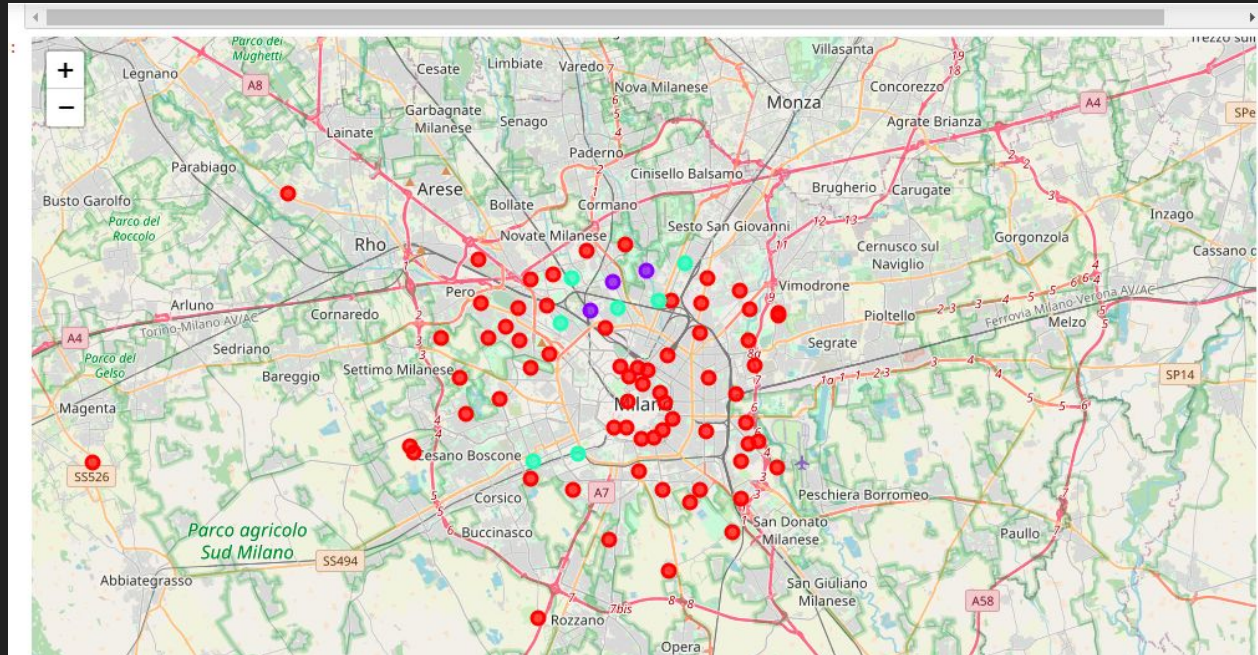
Data:

Output:

Map of Milan with its neighborhoods

Output (cntd.):

Map of Milan with the clusters

Output (cntd.):

Cluster 0

```
mi_merged.loc[mi_merged['Cluster Labels'] == 0]
```

	Neighborhood	Kebab Restaurant	Cluster Labels	Latitude	Longitude
38	Ortica	0.0	0	45.470960	9.241600
70	Stazione di Milano Centrale	0.0	0	45.485670	9.204050
37	Nosedo	0.0	0	45.433810	9.221370
76	Vigentino	0.0	0	45.433720	9.201040
39	Ponte Lambro (district of Milan)	0.0	0	45.442400	9.264200
40	Porta Garibaldi (Milan)	0.0	0	45.480650	9.187310
41	Porta Genova	0.0	0	45.457900	9.174570
42	Porta Lodovica	0.0	0	45.453180	9.189290
43	Porta Magenta	0.0	0	45.444469	8.886528
44	Porta Monforte	0.0	0	45.467229	9.202485
45	Porta Nuova (Milan)	0.0	0	45.479710	9.192470
46	Porta Romana (Milan)	0.0	0	45.456900	9.200950

Cluster 1

```
mi_merged.loc[mi_merged['Cluster Labels'] == 1]
```

	Neighborhood	Kebab Restaurant	Cluster Labels	Latitude	Longitude
0	Affori	0.018182	1	45.51410	9.17353
36	Niguarda	0.020000	1	45.51840	9.19201
5	Bovisa	0.020000	1	45.50313	9.16122

Cluster 2

```
mi_merged.loc[mi_merged['Cluster Labels'] == 2]
```

	Neighborhood	Kebab Restaurant	Cluster Labels	Latitude	Longitude
55	Prato Centenaro	0.010000	2	45.50671	9.199210
25	Giambellino-Lorenteggio	0.011236	2	45.44467	9.129891
19	Dergano	0.010000	2	45.50411	9.176470
6	Bovisasca	0.010526	2	45.51555	9.150940
4	Bicocca (district of Milan)	0.010000	2	45.52149	9.213260
67	San Cristoforo sul Naviglio (district of Milan)	0.010638	2	45.44763	9.154580
77	Villapizzone	0.010000	2	45.49834	9.144530

Results:

As seen from the output tables and clustered map, the best areas to open up a Turkish Kebab restaurant are in cluster 0, followed by cluster 2. Meanwhile cluster 1 has the highest number of Turkish Kebab restaurants, so it is not recommended to open up a restaurant in those areas.