Analyzing the locations in Paris to open a restaurant

CAPSTONE FINAL PROJECT

Introduction

- The primary objective of this project is to analyze the locations in Paris to choose a location that is ideal to open a restaurant.
- The project is mainly targeted towards investors who are looking for ideal places with less competition to open a restaurant.
- The task is accomplished using simple data analysis techniques in Python

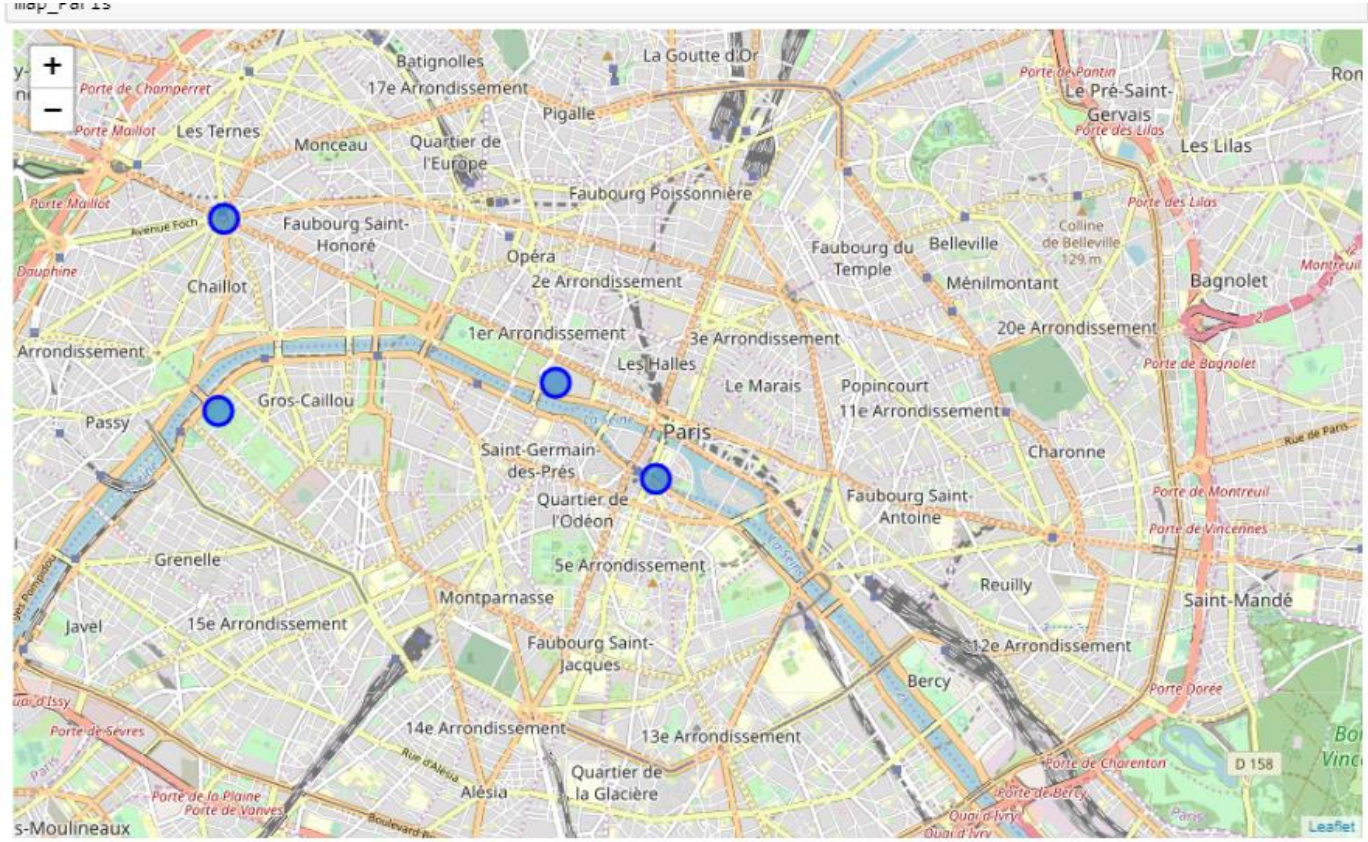
Data

(i) Paris location data accessible from “https://lvdesign.com.fr/coursera_data/paris.csv”

(ii) Further location data is accessed through FourSquare API.

	Lieux	Latitude	Longitude
0	Musée du Louvre	48.860611	2.335450
1	Notre Dame de Paris	48.852968	2.347708
2	Arc de Triomphe	48.873792	2.295028
3	Tour Eiffel	48.858370	2.294481

Folium map for the given data



Getting the nearby venues

	Lieux	Lieux Latitude	Lieux Longitude	Venue	Venue id	Venue Latitude	Venue Longitude	Venue Category
0	Musée du Louvre	48.860611	2.335450	Musée du Louvre	4adcda10f964a520af3521e3	48.860847	2.336440	Art Museum
1	Musée du Louvre	48.860611	2.335450	La Vénus de Milo (Vénus de Milo)	5864efb745c3ed1e7d88e96d	48.859943	2.337234	Exhibit
2	Musée du Louvre	48.860611	2.335450	Vestige de la Forteresse du Louvre	4f6dabf5003944083fe0002e	48.861577	2.333508	Historic Site
3	Musée du Louvre	48.860611	2.335450	Cour Napoléon	5072efe7e4b0c34b5146e7fd	48.861172	2.335088	Plaza
4	Musée du Louvre	48.860611	2.335450	Cour Carrée du Louvre	4c079d740ed3c928b6be797d	48.860360	2.338543	Pedestrian Plaza
5	Musée du Louvre	48.860611	2.335450	Place du Palais Royal	4b071505f964a520dcf622e3	48.862523	2.336688	Plaza
6	Musée du Louvre	48.860611	2.335450	Mona Lisa | La Joconde	56f279c4cd10850a585f5e31	48.860139	2.335337	Exhibit
7	Musée du Louvre	48.860611	2.335450	Pavillon des Sessions – Arts d'Afrique, d'Asie...	588ba9a9fc5a5f18a36a2a05	48.860724	2.332121	Art Museum
8	Musée du Louvre	48.860611	2.335450	Carrousel du Louvre	4adcda1df964a5202e3921e3	48.861642	2.334217	Shopping Mall

Searching for restaurants

```
restaurant = results['response']['venues']

restaurant = json_normalize(restaurant)
restaurant
```

ocation.labeledLatLngs	location.lat	location.lng	location.neighborhood	location.postalCode	location.state	name
{'label': 'display', 'lat': 48.85362193008465...	48.853622	2.349421	NaN	75004	Île-de-France	Restaurant Aux Tours de Notre-Dame
{'label': 'display', 'lat': 48.86029986248957...	48.860300	2.325392	NaN	75007	Île-de-France	Le Restaurant du Musée d'Orsay
{'label': 'display', 'lat': 48.85836582402155...	48.858366	2.294249	NaN	75007	Île-de-France	Restaurant 58 Tour Eiffel
{'label': 'display', 'lat': 48.87257417521437...	48.872574	2.302304	NaN	75008	Île-de-France	Jet Set Restaurant
{'label': 'display', 'lat': 48.86232131013030...	48.862321	2.351590	NaN	75003	Île-de-France	Le Restaurant des Poètes
{'label': 'display', 'lat':	48.848818	2.356911	NaN	75005	Île-de-France	Restaurant de l'Institut

Result :
To get the number of restaurants at each zip code

```
restaurant.groupby(["location.postalCode",""]).count()
```

	categories	hasPerk	id	location.address	location.cc	location.city	location.country	location.crossS
location.postalCode								
75001	4	4	4	4	4	4	4	2
75003	2	2	2	2	2	2	2	1
75004	2	2	2	2	2	2	2	1
75005	5	5	5	5	5	5	5	2
75006	1	1	1	1	1	1	1	1
75007	4	4	4	4	4	4	4	2
75008	2	2	2	2	2	2	2	0
75009	3	3	3	3	3	3	3	0
75010	3	3	3	3	3	3	3	0
75014	1	1	1	1	1	1	1	0
75015	1	1	1	1	1	1	1	1

Thank you