MIDNIGHT IN PARIS

Coursera "Battle of Neighborhoods" Capstone

Juan Manuel Gelos – August 2020

THE BUSINESS

- Midnight Company is a (Fantastic) tematic restaurant looking to open a branch in Paris. They are interested in finding the neighborhood that best suits their charisma: love for antiques.

- The restaurant prepares cuisine from all countries, offering a thematic setting and dishes based on different golden periods of each country

- Its main concern is to find a place where people and tourists usually enjoy existing restaurants, in areas surrounded with antiques shop

THE BUSINESS PROBLEM

*What is the best neighborhood in Paris for the new branch? fitting:*

▸ *In first place, has enough antiques shops that assure attraction on target customers*

▸ *In second, has an important presence of restaurants that assure the flow of customers on streets*

▸ *In third place, the selected Neighborhood is better than others with similar cuisines*

THE CANDIDATES: NEIGHBORHOOD IN PARIS

| Neighborhood	Latitude	Longitude	Antique Shops	Restaurants
Louvre	48.861147	2.338028	3	28
Bourse	48.868630	2.341474	3	68
Temple	48.866500	2.360708	2	66
Hôtel-de-Ville	48.856426	2.352528	8	68
Panthéon	48.846191	2.346079	1	63
Luxembourg	48.850433	2.332951	13	42
Palais-Bourbon	48.861596	2.317909	3	18
Élysée	48.846644	2.369830	0	15
Opéra	48.870645	2.332330	3	65
Entrepôt	48.876106	2.359910	0	63
Popincourt	48.858416	2.379703	5	42
Reuilly	48.839615	2.395752	2	23
Gobelins	48.832397	2.355583	1	31
Observatoire	48.829567	2.323962	3	20
Vaugirard	48.841370	2.300383	1	41
Passy	48.857505	2.280983	1	39
Batignolles-Monceau	48.881452	2.316667	1	35
Butte-Montmartre	48.890012	2.346467	1	34
Buttes-Chaumont	48.878396	2.381201	0	17
Ménilmontant	48.866708	2.383374	1	28

Antiques Shops
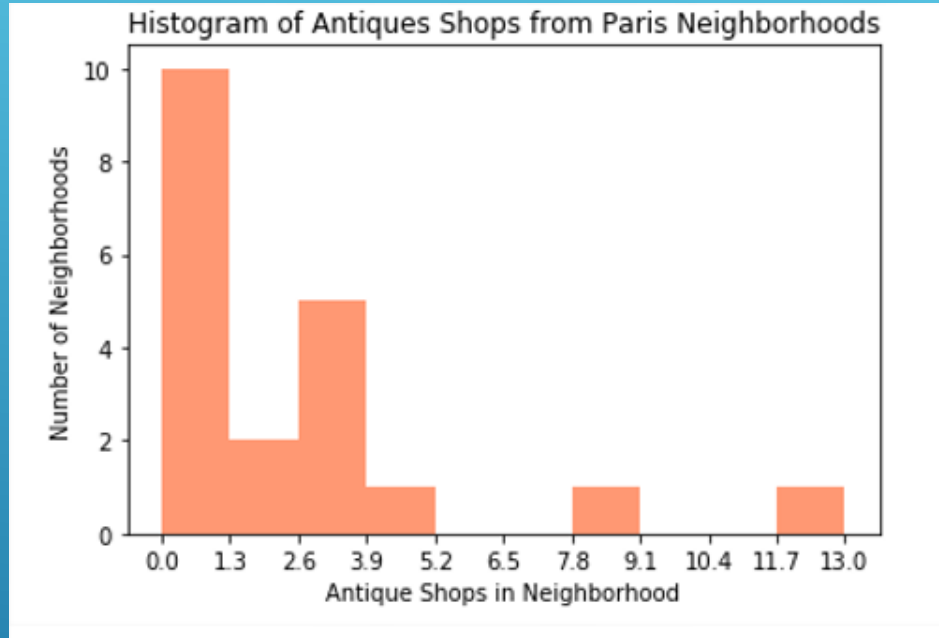
Restaurants
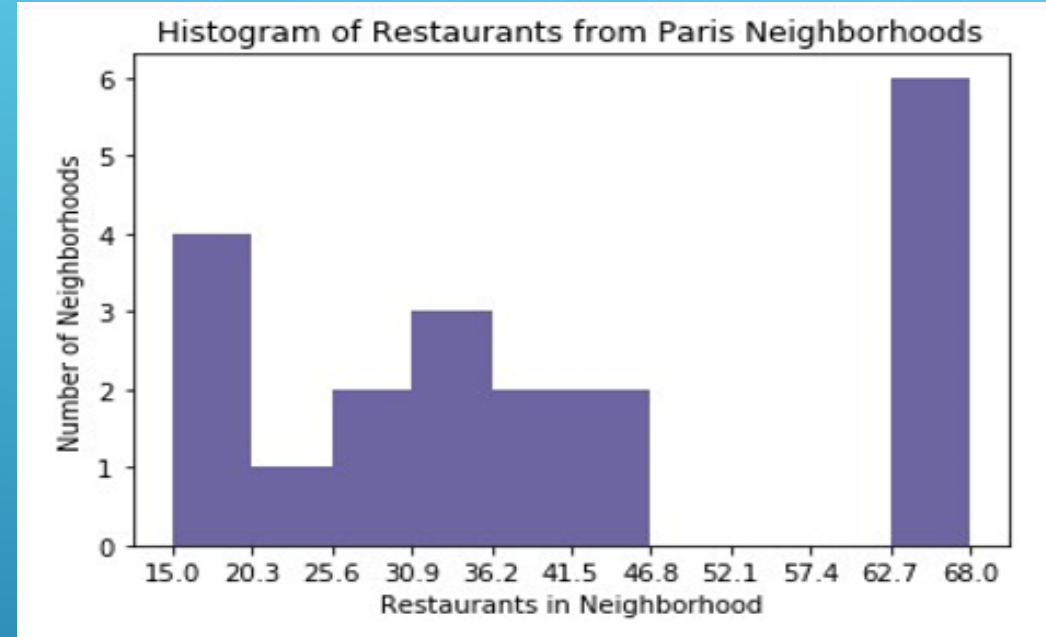
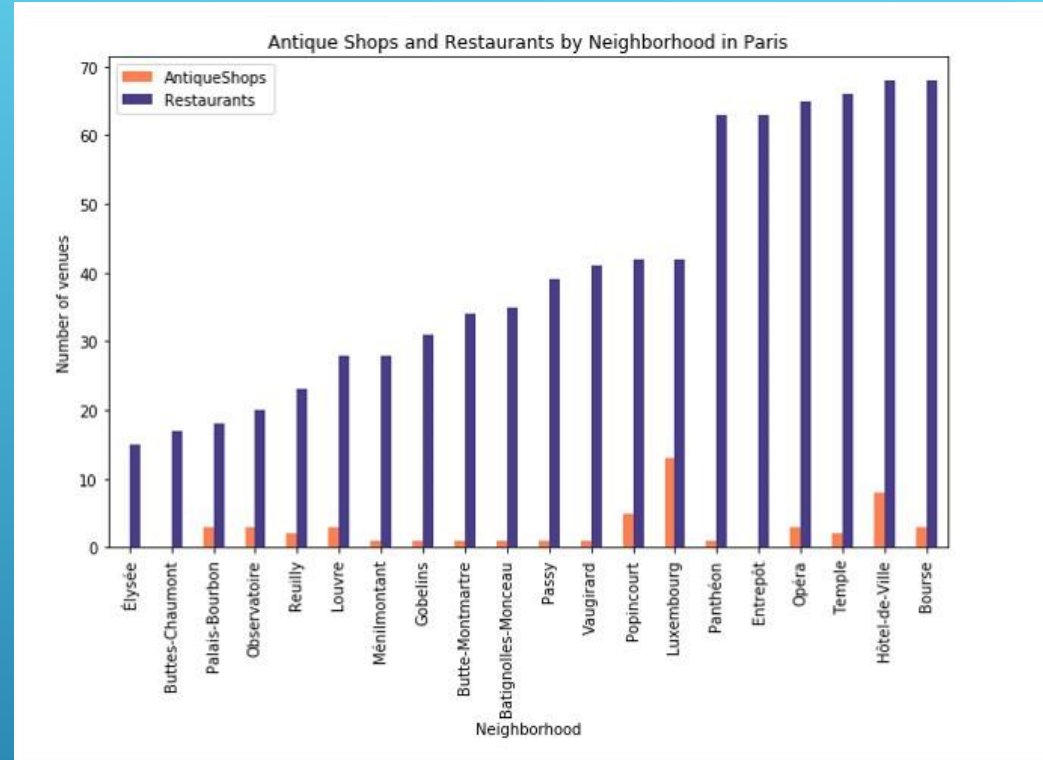# COUNTING # VENUES BY NEIGHBORHOOD

Antiques Shops
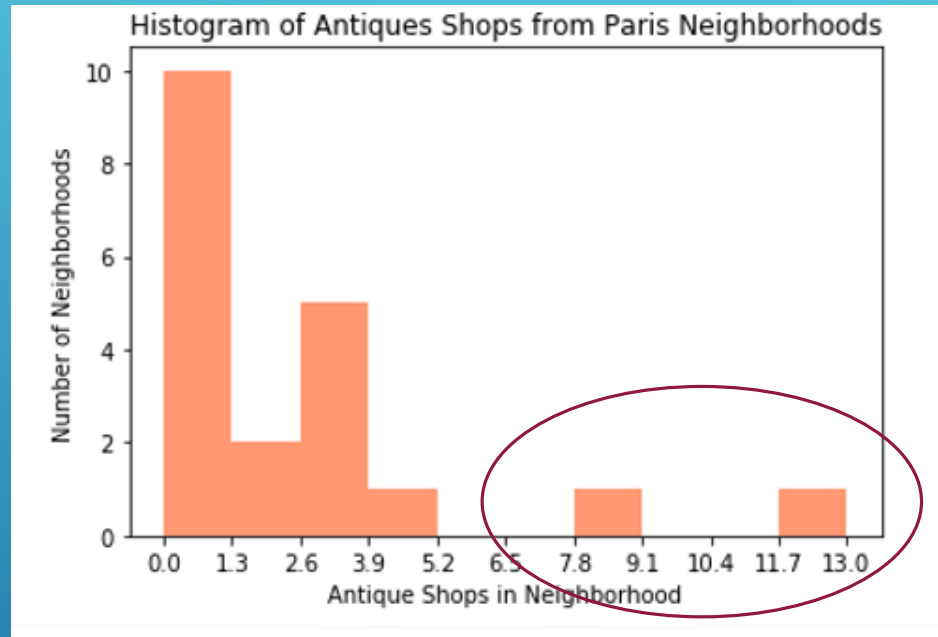
Restaurants
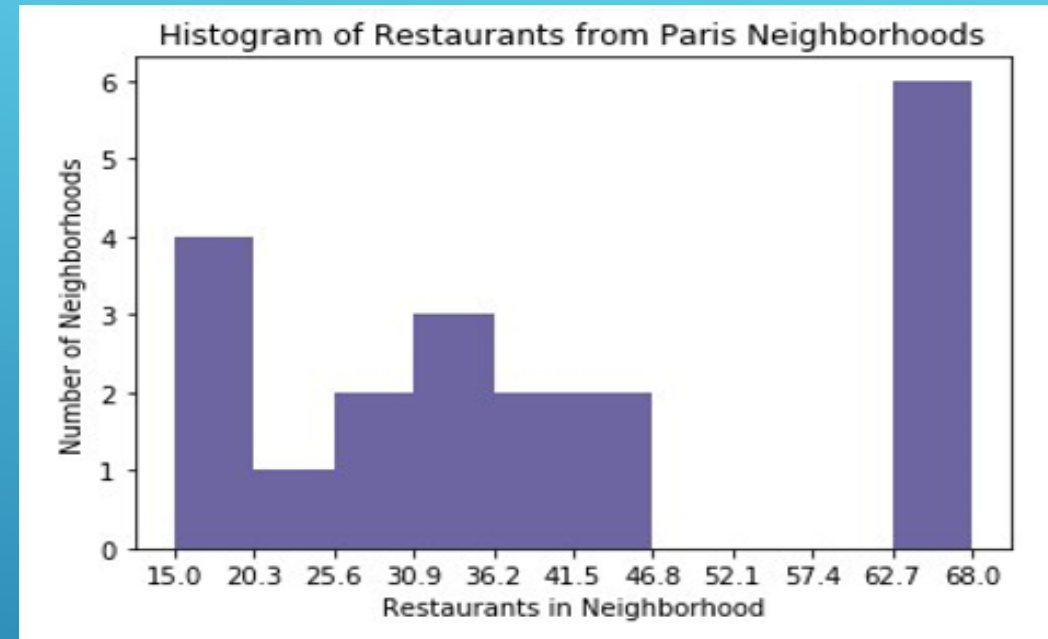
FOUND TWO NEIGHBORHOODS WITH A GOOD DENSITY OF ANTIQUES SHOPS (8 AND 13 SHOPS RESPECTIVELY)
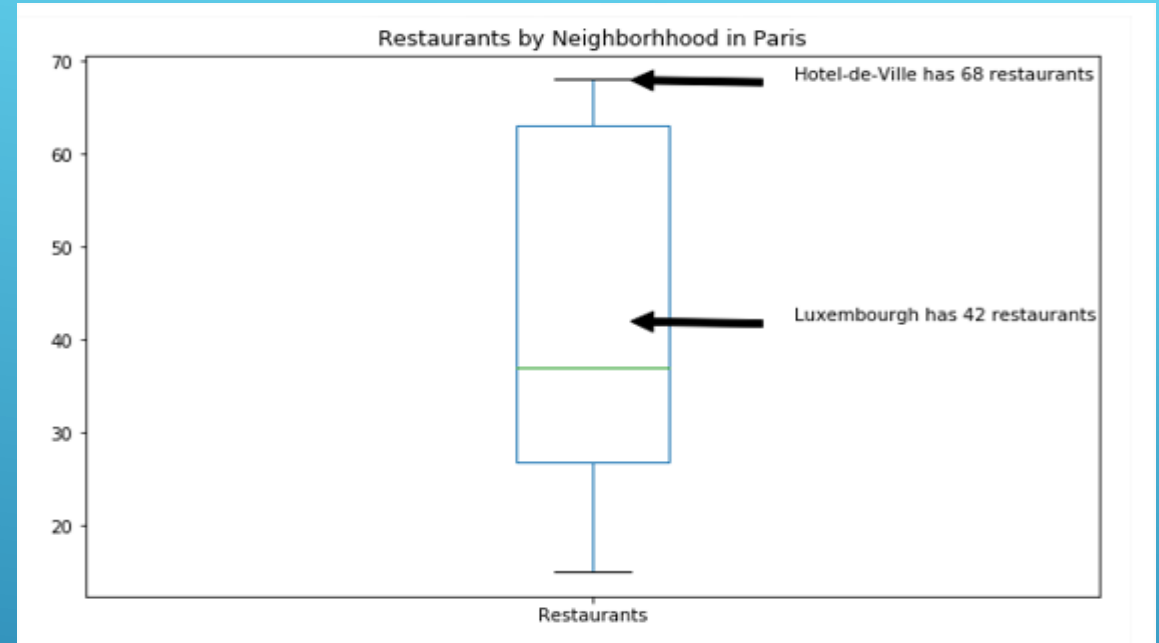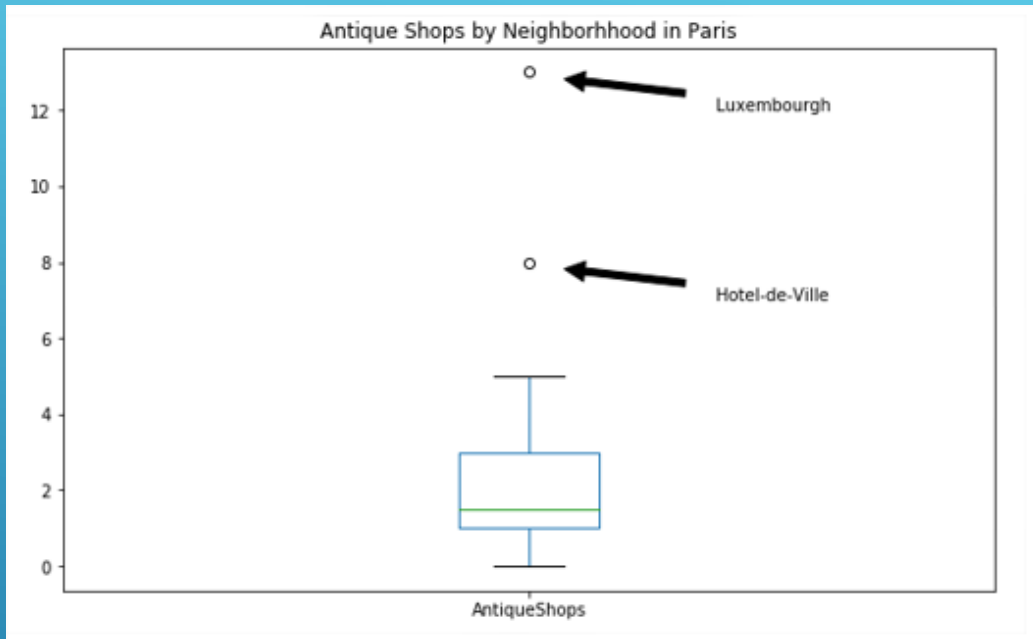
Antique Shops and Restaurants by Neighborhood in Paris

ANTIQUE SHOPS & RESTAURANTS LOOKING FOR A BALANCE
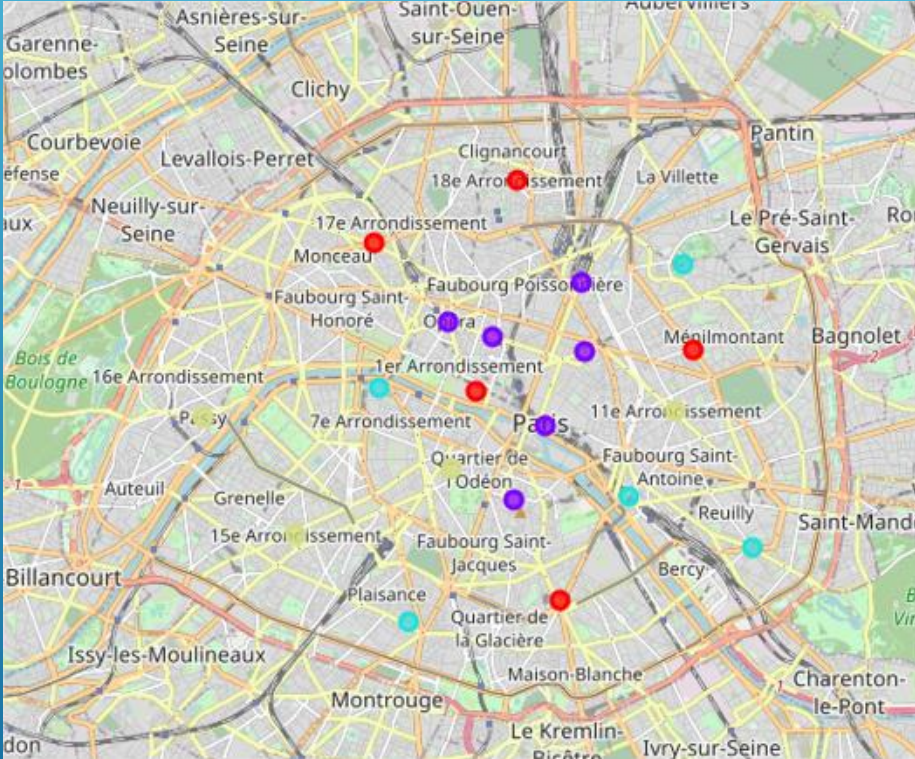
RESTAURANTS VS ANTIQUE SHOPS
NO CORRELATION

LUXEMBOURG AND HOTEL-DE-VILLE VS ALL THE REST IN PARIS

FOOD CLUSTERS
CLUSTERING NEIGHBORHOODS BY RESTAURANT CATEGORIES

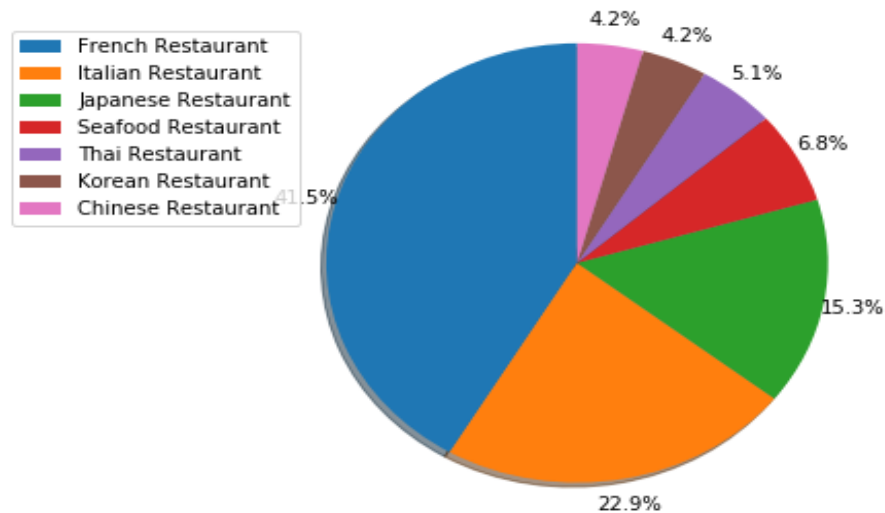▶ Food Cluster is important for the company because it defines the overall kind of food his competitors offer in each Neighborhood. Clustering Neighborhoods by this data bring us the capacity to compare the cuisine offer in wich the company prefer to set his branch

▶ For this purpouse, where going to apply **Machine Learning** to calculate Clustering in four Clusters of similar restaurant categories offer as seen on left map

Luxemburg's Cluster

Neighborhood	Latitude	Longitude	AntiqueShops	Restaurants	Cluster
★ Luxembourg	48.850433	2.332951	13	42	3
Popincourt	48.858416	2.379703	5	42	3
Vaugirard	48.841370	2.300383	1	41	3
Passy	48.857505	2.280983	1	39	3

Restaurant Categories on Luxembourgs Cluster

- French Restaurant
- Italian Restaurant
- Japanese Restaurant
- Seafood Restaurant
- Thai Restaurant
- Korean Restaurant
- Chinese Restaurant

41.5% / 22.9% / 15.3% / 6.8% / 5.1% / 4.2% / 4.2%
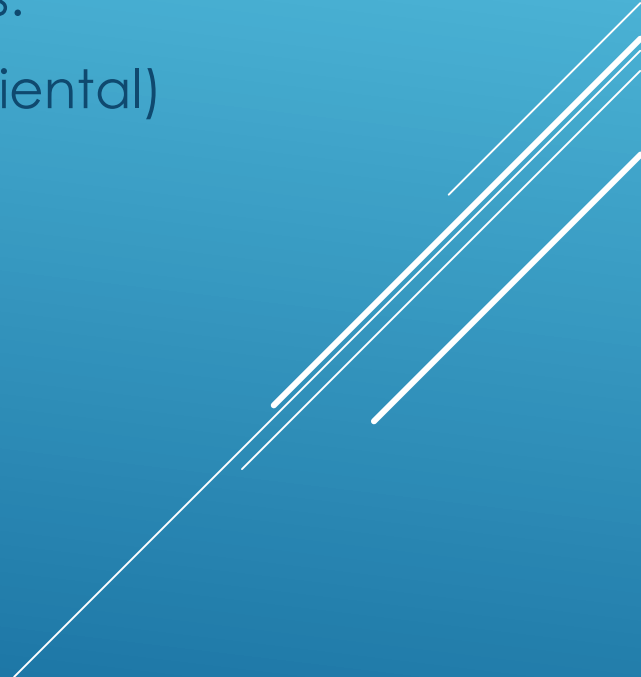
Hôtel-de-Ville's Cluster

Neighborhood	Latitude	Longitude	AntiqueShops	Restaurants	Cluster
Bourse	48.868630	2.341474	3	68	1
Temple	48.866500	2.360708	2	66	1
★ Hôtel-de-Ville	48.856426	2.352528	8	68	1
Panthéon	48.846191	2.346079	1	63	1
Opéra	48.870645	2.332330	3	65	1
Entrepôt	48.876106	2.359910	0	63	1

Restaurant Categories on Hotel-de-Ville Cluster

- French Restaurant
- Italian Restaurant
- Japanese Restaurant
- Thai Restaurant
- Indian Restaurant
- Chinese Restaurant
- Korean Restaurant

58.1% / 13.1% / 12.0% / 5.2% / 4.1% / 3.7% / 3.7%
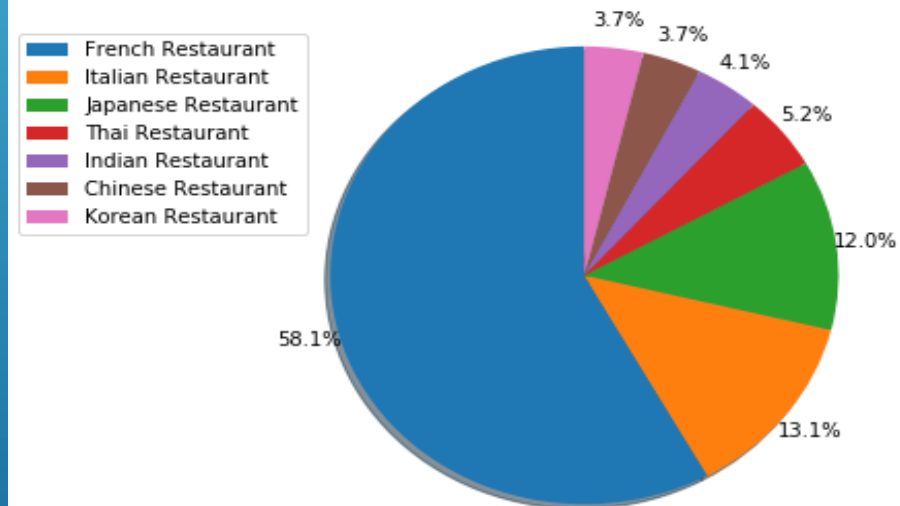
LUXEMBURGO WINS THE BATTLE WHY?

▸ The Antiques Shop's principal Neiborhood in Paris by far

▸ High presence of restaurants, above the average of Paris.

▸ Balanced cuisines offer on competitors (French,Italian,Oriental)

▸ Best Neighborhood in his own Food Cluster