The Battle of Neighborhoods (Week 1)

PROBLEM & BACKGROUND (Introduction/Business Problem):

Toronto and Los Angels are located in North America. Both are multicultural as well as the financial hubs of their respective countries.

We want to explore how much they are similar or dissimilar in aspects from a tourist point of view regarding food, accommodation, beautiful places, and many more. Today Tourism is one of the pillars of the economy and the people most often visits those countries who are rich in heritage and developed enough from a foreign prospective, like friendly environment.

Every city is unique in their own way and give something new. And now the information is so common regarding location of every place around the world on your fingertips which make it easier to explore. Therefore, tourists always eager to travel to different places on the basis of available information, and the comparison (the part of the information) between the two cities always assist to choose the specific places or according to their choice

DATA DESCRIPTION:

We will use Foursquare API to explore the data of two cities, in terms of their neighborhoods. The data also include the information about the places around each neighborhood like restaurants, hotels, coffee shops, parks, theaters, art galleries, museums and many more.

We selected one Borough from Toronto city to analyze its neighborhoods. and Los Angeles from California We will use machine learning technique, "Clustering" to segment the neighborhoods with similar objects on the basis of each neighborhood data. These objects will be given priority on the basis of foot traffic (activity) in their respective neighborhoods. This will help to locate the tourist's areas and hubs, and then we can judge the similarity or dissimilarity between two cities on that basis

DATA EXAMPLES:

I will be using several data sources from the Web and CSV files and the consolidate them as a Pandas dataframe as following example:

	Postcode	Borough	Neighborhood	Latitude	Longitude
0	M1B	Scarborough	Malvern / Rouge	43.806686	-79.194353
1	M1C	Scarborough	Rouge Hill / Port Union / Highland Creek	43.784535	-79.160497
2	M1E	Scarborough	Guildwood / Morningside / West Hill	43.763573	-79.188711
3	M1G	Scarborough	Woburn	43.770992	-79.216917
4	M1H	Scarborough	Cedarbrae	43.773136	-79.239476