Capstone Project - The Battle of Neighborhoods - Land Prices & Venues Data Analysis of Tokyo Metropolis (Week 1)

1. A description of the problem and a discussion of the background.

As my assignment, I would like to choose Tokyo Metropolis which is one of the largest cities in Asia Pacific. It has about over 13 million people and consists of 23 wards and rural cities & islands. Tokyo Metropolis will have Summer Olympic game in 2020 and will have a lot of visitors.

At my assignment, I would analyze where is the best location to start a restaurant or to open an office for business from land price view point and venue data view point. In order to start new restaurant or new business, we will need to consider what kind of venues are available in Tokyo Metropolis. At the same time, in order for us to open a restaurant or an office, we will also need to choose appropriate area which has reasonable rental price of venues.

Among all cities and 23 wards (central area) of Tokyo Metropolis, I would like to focus on 23 wards which has more than 9 million people and it will be the center of business, politics and all the cultural activities. In 23 wards, I would like to study venue information around major subway station. Major subway stations are located in major area of 23 wards and as distance from station is essential to start new business in central Tokyo. Then, I would like to show major venue category and land price of central Tokyo area.

2. A description of the data and how it will be used to solve the problem.

In order to consider the problem, we will use the data as below:

- I used land price information from Tokyo Metropolitan Government, Bureau of Finance (2018).
   (<u>http://www.zaimu.metro.tokyo.jp/kijunchi/30nen/index.html</u>). This land price will be reflected to rental price of office or restaurant and it will be the major part of the cost of new business.
- Geojson data is available for Tokyo Metropolis, and I used 23 ward parts to create choropleth map of average land price for each of 23 wards from the land price information. (https://github.com/dataofjapan/land/blob/master/tokyo.geojson)
- I used Tokyo subway map and location information.
   ( <a href="https://www.tokyometro.jp/en/subwaymap/">https://www.javadrive.jp/google-maps-javascript/data/index2.html</a>)
- 4. To find our appropriate places to open a restaurant or an office, I used Foursquare API to find venues around major sub way station which are located in major part of Tokyo Metropolis 23 wards.