

## **Assumption and Background of Problem**

I saw the movie "The Devil Wears Prada(2006)". I've never been in New York, therefore, I imagine the life in New York in this project. However, I've been in Seoul, Korea for 27 years and I really enjoy my life in Seoul. Therefore, I want to find the very similar place in New York to Seoul, Korea.

I have some conditions which are similar to my home.

- [1] 2 bedrooms at least
- [2] I'm very familiar to metro system
- [3]
- [4] Favor: I've heard lots of nice stories in Manhattan(expecially from the drama "Manhattan Romance"). I want to live near in Manhattan.

This thought is about location and venues problem with data. This project is about how to accomplish the goal that imagination to real life based on data science.

### ***The following data will be needed:***

- List of Boroughs and neighborhoods of Manhattan with their latitude and longitude
- List of Subway metro stations in Manhattan with their address location
- Venues for each Manhattan neighborhood (than can be clustered)
- Venues for subway metro stations, as needed
- List of apartments for rent in Manhattan area with their addresses and price
- Preferably, a list of apartment for rent with additional information, such as price, address, area, # of beds, etc

### ***The data will be used by solving this problems:***

- [1] What is the cost of rent (per square ft) around a mile radius from each subway metro station?
- [2] What is the area of Manhattan with best rental pricing that meets criteria established?
- [3] What is the distance from work place ( Park Ave and 53 rd St) and the tentative future home?
- [4] What are the venues of the two best places to live? How the prices compare?
- [5] How venues distribute among Manhattan neighborhoods and around metro stations?
- [6] Are there any tradeoffs between size and price and location?