Coursera Capstone Project Week 4 Assignment:

**Exploring the best places in Atlanta Metropolitan Area to start an Organic health food restaurant**

**Description of the problem and a discussion of the background:**

A group of friends of mine would like to start a restaurant that specializes in organic health food and beverages in Atlanta Metropolitan area. They have few places in mind but do not know what would be the best place to start such a business. Here are some important factors to be considered before a decision is taken:

**Demographics** of the area certainly important. Factors like the average age of the residents, household income, family size, etc. will definitely matter.  Since this is not going to be a regular eating joint, it targets a section of people who live a healthy life style and do not mind to spend little extra on quality organic food and drinks. So, they need to carefully choose a place that can supply good customer base that belong to this category in order to operate successfully.

Actual physical **location** of the restaurant is also an important factor. It needs to be accessible easily from highways/major local roads and should have good visibility to commuters. That way this place will always be fresh in their memory and can easily pop up as a first option when they think of healthy food.

The objective of this project is set as helping them by analyzing different cities in metro Atlanta area for demographics, income, standard of living and the resident’s preferences and then suggest an ideal location for starting their health food restaurant business.

**Description of the data and how it will be used to solve the problem:**

I plan to use different sources to collect various data points about the cities in Metropolitan Atlanta area that will help me with the analysis.

Income data:

<https://en.wikipedia.org/wiki/List_of_Georgia_(U.S._state)_locations_by_per_capita_income>

This Wikipedia site provides the list of cities in the state of Georgia along with their per capita income. I will scrape this piece of data from the above web page and store in a dataframe. I will then refine and use this data to draw some useful conclusions. Obviously, the top few cities in this list would be good candidates for opening an organic health food joint.

Crime Rate:

<https://www.alarms.org/safest-cities-in-georgia/>

The above website provides a list of top safe cities in the state of Georgia along with their statistics of violent crimes and property crimes. I will load this data into a pandas dataframe using BeautifulSoup web scraping package and then refine it. Then I will shortlist the above list to pick top few safest cities.

Foursquare APIs: I will use Foursquare APIs to get the people’s preferences in these cities and the most frequented places and their categories. This will give a clear idea of the psychographics of the people living in these cities and it will help in deciding the location.

Once I work with these different data sources individually, I will combine them and pick the most favorable places when all these 3 factors are considered and present this very short list to my friends as suggest list of locations. Since this list is come up with careful analysis of the important data points, I have a high degree of confidence that this will answer one of their biggest questions (location) in starting their business.