1. A description of the problem and a discussion of the background. (15 marks)

I am presently looking at moving to one of three cities after I finish my degree. The three cities are: Vancouver, Montreal and Calgary. I would like know which city and which neighborhoods in each city have the food options that I would be most interested in. I will rank vegetarian, vegan, Thai, Japanese, Indian and others by order of importance and then try to rank the best Neighborhoods in each city.

Wanting to know what locations have the food options that people desire could have applications for tourism. Before thinking about somewhere to go I often look at what kind of food is offered via Google etc. If an application could just output the best places to go in Mexico with good food it would make life a little easier.

2. A description of the data and how it will be used to solve the problem. (15 marks)

The data is from Foursquare and is similar to the data that we have used for this course. The difference is that the data will come from three cities: Vancouver, Montreal and Calgary. Neighborhoods will be ranked by way of preferences based on food choices that are the most important for any User. Higher ranked neighborhoods will carry more weight. Users could potentially assign weights amongst their choices. I would like to use machine learning in some capacity but I am not 100% sure on how I will implement it presently. I could use clustering to find clusters that are most appropriate for Asian food for example.

For data cleaning I will be using the BeautifulSoup package. I will most likely scrape the data that I need for this project via Wikipedia if I can. The Geocoder Python library will be used to get geographical coordinates for visualization. Initially this submission will mirror what I submitted for the last assignment. Folium will be used for visualizing location data via mapping. I will construct data in a pandas data frame to look similar to this (maybe without postal codes):

	Postal Code	Borough	Neighborhood	Latitude	Longitude
0	M1B	Scarborough	Rouge, Malvern	43.806686	-79.194353
1	M1C	Scarborough	Highland Creek, Rouge Hill, Port Union	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