**Coursera Capstone Project: Applied Data Science**

1. **Introduction**

New York City's demographics show that it is a large and ethnically diverse metropolis. It is the largest city in the United States with a long history of international immigration. New York City was home to nearly 8.5 million people in 2014, accounting for over 40% of the population of New York State and a slightly lower percentage of the New York metropolitan area, home to approximately 23.6 million. Over the last decade the city has been growing faster than the region. The New York region continues to be by far the leading metropolitan gateway for legal immigrants admitted into the United States. New York City has also been a major point of entry for immigrants; the term "melting pot" was coined to describe densely populated immigrant neighborhoods on the Lower East Side. As many as 800 languages are spoken in New York, making it the most linguistically diverse city in the world. English remains the most widely spoken language, although there are areas in the outer boroughs in which up to 25% of people speak English as an alternate language, and/or have limited or no English language fluency. English is least spoken in neighborhoods such as Flushing, Sunset Park, and Corona. With its diverse culture, comes diverse food items. There are many restaurants in New York City, each belonging to different categories like Chinese, Indian, and French etc. So as part of this project, we will list and visualize all major parts of New York City that has great Indian/Pakistani restaurants.

1. **Business Problem**

People from Pakistan working in New York need to eat breakfast, lunch, dinner and snacks and that food needs to be halal for People from Pakistan, in this project we will:

* List and visualize the best foods spots offering Pakistani food
* Find best location for Pakistani Food
* What areas have most potential in offering Pakistani food?
* Which areas don’t offer Pakistani food?
* What should be the best place to live for a Pakistani considering halal food.

1. **Data**

The data for this project has been retrieved and processed through multiple sources, giving careful considerations to the accuracy of the methods used. The Neighborhoods data of the neighborhoods in New York can be extracted out by web scraping using BeautifulSoup library for Python. The neighborhood data is scraped from a Wikipedia webpage.