California is a state known for its population diversity. There are increasingly more Hispanic/Latino immigrants moving into the state. Los Angeles is the biggest city in California and is certainly very attractive for both business/job opportunities and people who enjoy city life. Given the population ethnic composition and economy growth, it could be quite profitable to open a Mexican restaurant, if we can locate the right neighborhood.

When we talk about Mexican restaurants, we are actually referring to a collection of different restaurant styles. Recently 'Modern Mexican' food has come to the attention, you can find more and more start to appear in the vibrant areas. Modern Mexican food focuses more on innovation and fine ingredients, it evolved out of the traditional Mexican food and not so much into the authenticity, which is quite distinguishable at the first time you see the dishes. New York Times had a great review article called "'Modern Mexican' Steps Into the Spotlight" (https://www.nytimes.com/2017/05/16/dining/modern-mexican-food-steps-into-the-spotlight.html) that beautifully addressed the essence of Modern Mexican food style. It is healthier, fancier and distinctive, that's also the reason it is particularly attractive to younger generation who would like to try out new things and can afford the "higher than usual" price.

Therefore we need to identify neighborhoods with high Latino/Hispanic population (for potential customer number), significant portion of young people, and better to have high income level. Additionally, these neighborhoods should already be accustomed to Mexican food as a start.

Data

1. The zip code database is USPS data provided by Los Angeles county website (ZIP_Codes_and_Postal_Cities.csv) https://data.lacounty.gov/GIS-Data/ZIP-Codes-and-Postal-Cities/c3xr-3jw2. It contains the city names, zip codes and their location in coordinates.

2. I will use the coordinate data from above to obtain surrounding venue information from Four Square API, using one hot encoding method to categorize the zip code areas for their venues. I will find out which group of zip codes host more restaurant with Mexican cuisine.

3. I will also get selected characteristics of the total and native populations in LA(from US census), from which I will use the "Total population", "AGE-25 to 44 years", "Median age(years)", "Hispanic or Latino origin", "INDIVIDUALS' INCOME" as parameters to screen the target zip codes.