The selection betweeen Washington and New York for Establishment of Indian Cusine Restaurent

Abahy Avinash Dalal

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1. Introduction

1.1 Background

This report is presented to choose between the Wasington and New York for establishment of the Indian cusine restaurent. According to American census 2010 the Indian Asian Population in Wasington city was 61,124 and in New york city was 313,620. The demand for the Indian taste in American market is growing day by day.

1.2 Problem

The prolen statment for the particular project is to find the sutable location. As in both city the capital investment is high and the to overcome the profit margin it is neccessary to examin the same.

1.3 Interest

The area of intrest for the same is the capital cost of the investment and the return in the investment. The economical aspect is importent.

2. Data acquisition and cleaning

2.1 Data sources

for this project I am usinf Foursquar API, to find out the total number of indian hotel in the vicinity of the New York and Washington.

2.2 Data cleaning

Data Cleaning is performed in frist steap we find the Indian restaurent and it is found that as we set the redius of 35000 it also takes neighbouring city . So i select only the city with washington and the New yourk. And then group by the postal code

2.3 Feature selection

for the clustering Pourpose we select the latitude, longitude and the distance and the postal code as the feature columens and the apply the clustering

3. Exploratory Data Analys

3.1 Calculation of target variable

By Cleaning the Data we get following Data for New york

	postalCode	Counts
0	10001	2
1	10003	1
2	10004	4
3	10005	2
4	10006	1
5	10007	7
6	10010	1
7	10011	1
8	10013	3
9	10016	1
10	10017	1
11	10019	1
12	10022	3
13	10023	1
14	10034	1
15	10035	1
16	10036	1
17	10038	1
18	10128	1

and that for Washington

	postalCode	Counts
0	20001	4
1	20002	1
2	20003	4
3	20004	1
4	20005	2
5	20006	4
6	20007	2
7	20008	2
8	20010	1
9	20240	2
10	20560	2

and by having geographical representation with the help of the folium we get the following representations for both.
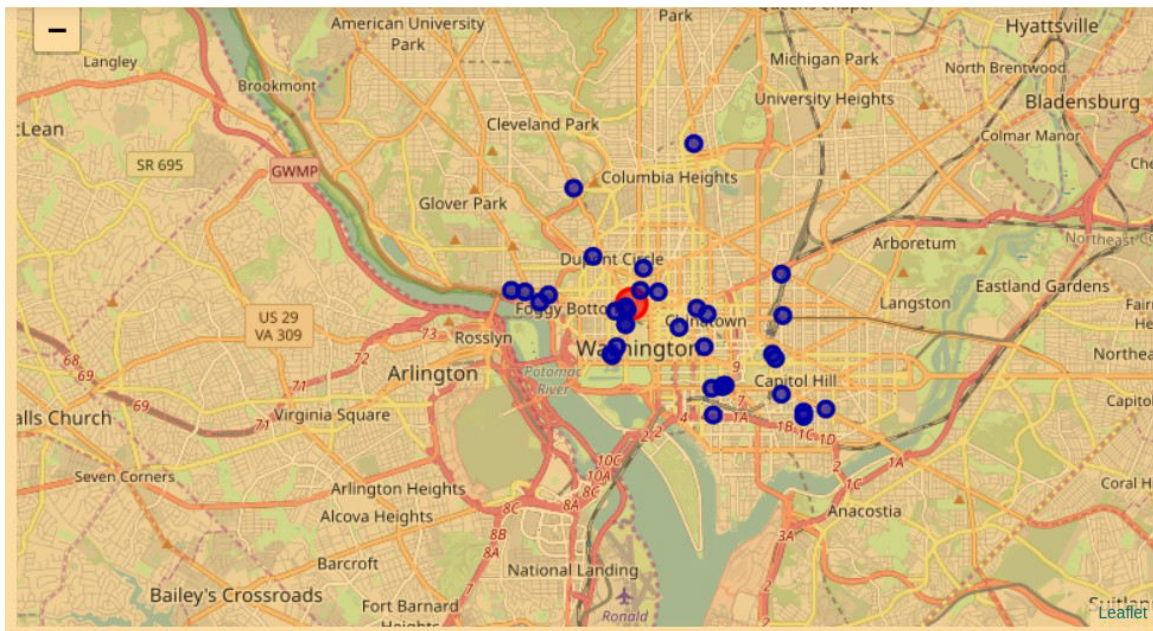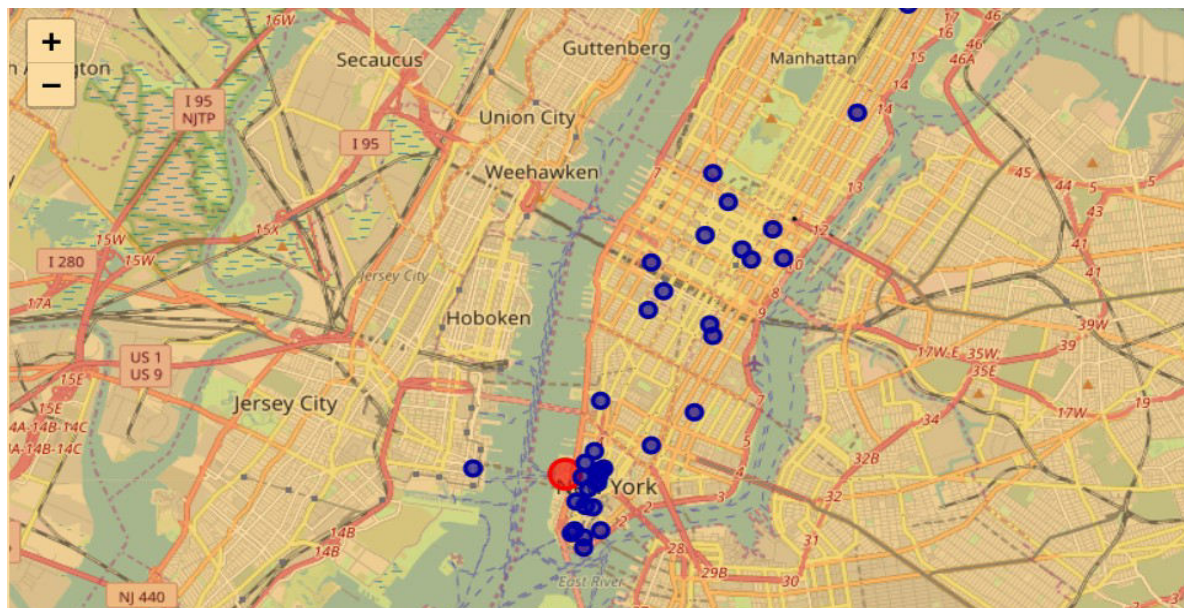

Illustration 1: Map of Washington

Illustration 2: Map of New York

and by analysis we found that Total Number of indian Restaurents in Washington =36
Total Number of indian Restaurents in New York =37

Predictive Modeling

We apply the clustering to the model and found that in washington area with postalcode=20004 and in Newyork area with postalcode=10006 is sutable for opening of the Indian Restaurent.

Conclusions

Conclution of the Project is that by appling the clustering method we found that the New York is Sutable place for the Opening of the Indian Cusine restaurent, though the number of restaurent is 37 but the population is also major part in the same section. So we recoment to open Restaurent in New Yorwith postalcode 10006.