Introduction

India is rightly called the Land of Spices. No country in the world produces as many varieties of spices as India.According to Indian Food Theory, our food has 6 different flavours: sweet, salty, bitter, sour, astringent and spicy.Surely when you come to India you will be fascinated by its food and find best Indian cusine providing restraunts.

So in this project we will be finding all the top Indian cusine restraunts in the capital of delhi for the tourists.

Data

For this project the required data is as follows

1. The data set of delhi which contains its neighbourhoods , latitude, longitudes is as follows through a csv file named delhi_dataset.csv from kaggle https://www.kaggle.com/shaswatd673/delhi-neighborhood-data/version/1#delhi_dataSet.csv
2. then we will use foursquare for extracting the data of all the restaurants in delhi especially the restaurants providing the Indian cuisine

• Data will be collected from the csv file and cleaned and processed into a dataframe.

• FourSquare is used to locate all venues and then filtered by Indian restaurants. Ratings, tips, and likes by users will be counted and added to the dataframe.

• Data will be sorted based on rankings

• Finally, the data will be visually assessed using graphing from various Python libraries.

Approach

- Collect the new york city data
- Using FourSquare API we will find all venues for each neighborhood.
- Filter out all venues that are Indian Resturants.
- Find rating , tips and like count for each Indian Resturants using FourSquare API.
- Using rating for each resturant , we will sort that data.

- Visualize the Ranking of neighborhoods using folium library(python)

Questions that can be asked using the above mentioned datasets

- What is best location in delhi for Indian Cuisine ?
- Which areas have potential Indian Resturant Market ?
- Which all areas lack Indian Resturants ?
- Which is the best place to stay if I prefer Indian Cuisine ?

Analysis

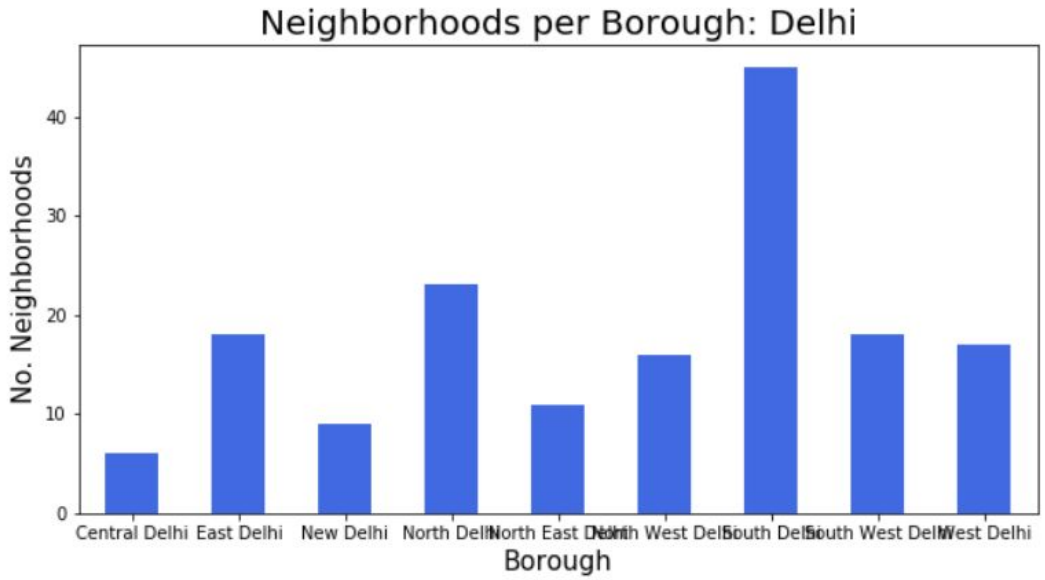
We will import the required libraries for python.

- pandas and numpy for handling data.
- request module for using FourSquare API.
- geopy to get co-ordinates of City of New York.
- folium to visualize the results on a map

```
#importing the libraries
import random
from IPython.display import Image
from IPython.core.display import HTML
import pandas as pd
import numpy as np
import requests
from bs4 import BeautifulSoup
import os
#!conda install -c conda-forge folium=0.5.0 --yes
import folium
#!conda install -c conda-forge geopy --yes
from geopy.geocoders import Nominatim
import matplotlib.pyplot as plt
import matplotlib.cm as cm
import matplotlib.colors as colors
%matplotlib inline
import seaborn as sns
from pandas.io.json import json_normalize
print('Done!')
```

visualizing the data frame

```
clr='royalblue'
df.groupby('Borough')['Neighborhood'].count().plot.bar(figsize=(10,5), color=clr)
plt.title('Neighborhoods per Borough: Delhi', fontsize = 20)
plt.xlabel('Borough', fontsize = 15)
plt.ylabel('No. Neighborhoods',fontsize = 15)
plt.xticks(rotation = 'horizontal')
plt.show()
```

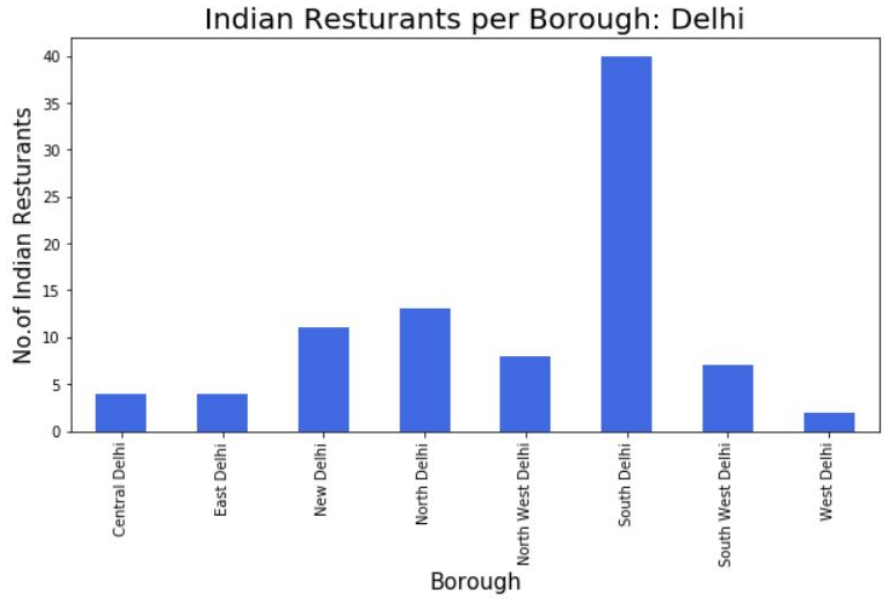


```
column_names=['Borough', 'Neighborhood', 'ID','Name']
rest=pd.DataFrame(columns=column_names)
count=1
for row in df.values.tolist():
    Borough, Neighborhood, Latitude, Longitude=row
    venues = get_venues(Latitude,Longitude)
    indian_resturants=venues[venues['Category']=='Indian Restaurant']
    print('(',count,'/',len(df),')','Indian Resturants in '+Neighborhood+', '+Borough+':'+str(len(indian_r
esturants)))
    print(row)
    for resturant_detail in indian_resturants.values.tolist():
        id, name , category=resturant_detail
        rest=rest.append({'Borough': Borough,
                                            'Neighborhood': Neighborhood,
                                            'ID': id,
                                            'Name' : name
                                           }, ignore_index=True)
    count+=1
```

```
( 1 / 163 ) Indian Resturants in Adarsh Nagar, North West Delhi:0
['North West Delhi', 'Adarsh Nagar', 28.614192499999998, 77.0715411848447]
( 2 / 163 ) Indian Resturants in Ashok Vihar, North West Delhi:0
['North West Delhi', 'Ashok Vihar', 28.6994533, 77.1848256]
( 3 / 163 ) Indian Resturants in Azadpur, North West Delhi:0
['North West Delhi', 'Azadpur', 28.707656800000002, 77.1755473]
( 4 / 163 ) Indian Resturants in Bawana, North West Delhi:0
['North West Delhi', 'Bawana', 28.79966, 77.03288470000001]
( 5 / 163 ) Indian Resturants in Dhaka, North West Delhi:0
['North West Delhi', 'Dhaka', 39.0317139, -90.2612233]
( 6 / 163 ) Indian Resturants in Jahangirpuri, North West Delhi:0
['North West Delhi', 'Jahangirpuri', 28.7259717, 77.162658]
( 7 / 163 ) Indian Resturants in Karala, North West Delhi:0
['North West Delhi', 'Karala', 28.73514, 77.0325105]
( 8 / 163 ) Indian Resturants in Keshav Puram, North West Delhi:0
['North West Delhi', 'Keshav Puram', 28.688926399999996, 77.16168329999999]
( 9 / 163 ) Indian Resturants in Kingsway Camp, North West Delhi:0
```

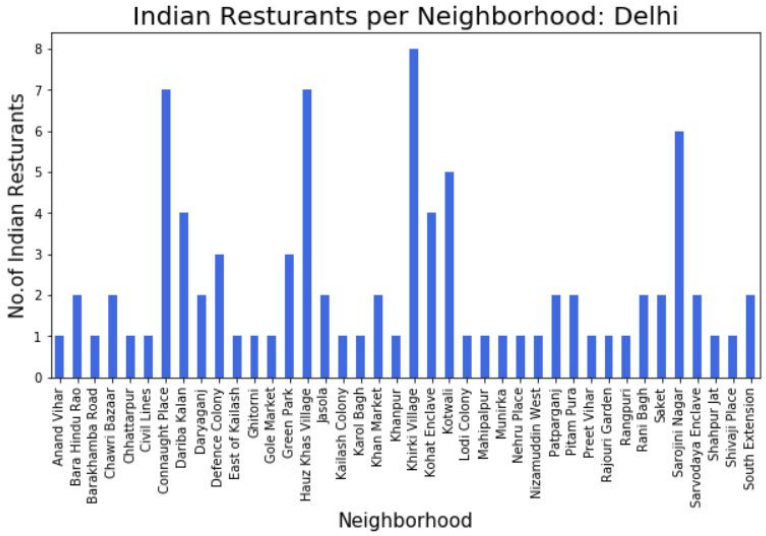
plotting the data

```
rest.groupby('Borough')['ID'].count().plot.bar(figsize=(10,5), color = clr)
plt.title('Indian Resturants per Borough: Delhi', fontsize = 20)
plt.xlabel('Borough', fontsize = 15)
plt.ylabel('No.of Indian Resturants', fontsize=15)
plt.xticks()
plt.show()
```



n [92]:

```
rest.groupby('Neighborhood')['ID'].count().plot.bar(figsize=(10,5), color = clr)
plt.title('Indian Resturants per Neighborhood: Delhi', fontsize = 20)
plt.xlabel('Neighborhood', fontsize = 15)
plt.ylabel('No.of Indian Resturants', fontsize=15)
plt.xticks()
plt.show()
```



```
rest[rest['Neighborhood']=='Khirki Village']   ###write the neighborhood
```

	Borough	Neighborhood	ID	Name
59	South Delhi	Khirki Village	4f5c8cf6e4b086681c1463df	Khan Chacha
60	South Delhi	Khirki Village	4bcb2302937ca59317e5a892	The Punjab Grill
61	South Delhi	Khirki Village	4cfb6041d8468cfad158f46b	Spice Market
62	South Delhi	Khirki Village	518d1338498e9eba21ec9c00	Barbeque Nation Saket
63	South Delhi	Khirki Village	51f55a91498e4a9a1d319b34	Gulati Spice Market
64	South Delhi	Khirki Village	529f4f1d498e9081593a1dbe	Dhaba by Claridges
65	South Delhi	Khirki Village	4bc47feeabf495213315c593	Sattvik
66	South Delhi	Khirki Village	4eb56359b634a0486020d217	Parathe Hi Parathe

Conclusion

Hence we got all the top rated restaurants which provide Indian cuisine and hence we can explore the place without any time waste on thinking where to go and without missing the best experiences when we go to some new place like new Delhi

Thank you