

In [3]:

```
import pandas as pd
import numpy as np
data = "311_Service_Requests_2020.csv"
df = pd.read_csv(data)
```

/Users/zhengyingxiang/opt/anaconda3/envs/dataanalytics/lib/python3.8/site-packages/IPython/core/interactiveshell.py:3441: DtypeWarning: Columns (20,31,32) have mixed types.Specify dtype option on import or set low_memory=False.

```
exec(code_obj, self.user_global_ns, self.user_ns)
```

In [8]:

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 2587316 entries, 0 to 2587315
Data columns (total 41 columns):
 #   Column                                Dtype
---  -
 0   Unique Key                           int64
 1   Created Date                          object
 2   Closed Date                          object
 3   Agency                               object
 4   Agency Name                          object
 5   Complaint Type                       object
 6   Descriptor                           object
 7   Location Type                        object
 8   Incident Zip                         float64
 9   Incident Address                     object
10   Street Name                          object
11   Cross Street 1                       object
12   Cross Street 2                       object
13   Intersection Street 1                 object
14   Intersection Street 2                 object
15   Address Type                         object
16   City                                 object
17   Landmark                             object
18   Facility Type                        object
19   Status                               object
20   Due Date                             object
21   Resolution Description                 object
22   Resolution Action Updated Date        object
23   Community Board                       object
24   BBL                                  float64
25   Borough                              object
26   X Coordinate (State Plane)            float64
27   Y Coordinate (State Plane)            float64
28   Open Data Channel Type                object
29   Park Facility Name                    object
30   Park Borough                          object
31   Vehicle Type                          object
32   Taxi Company Borough                 object
33   Taxi Pick Up Location                 object
34   Bridge Highway Name                   object
35   Bridge Highway Direction              object
36   Road Ramp                            object
37   Bridge Highway Segment                object
38   Latitude                             float64
39   Longitude                             float64
40   Location                             object
dtypes: float64(6), int64(1), object(34)
memory usage: 809.3+ MB
```

In [5]:

```
N1=pd.Series(df['Complaint Type']).value_counts()['Illegal Parking']
```

N1

Out[5]: 193721

```
In [6]: N11=df['Complaint Type'].count()  
N11
```

Out[6]: 2587316

```
In [9]: Global_ratio=N1/N11  
Global_ratio
```

Out[9]: 0.07487334365033108

```
In [7]: N2=pd.Series(df[df['Incident Zip']==10025]['Complaint Type']).value_counts()['Illegal Parki  
N2
```

Out[7]: 792

```
In [10]: N22=df[df['Incident Zip']==10025]['Complaint Type'].count()  
N22
```

Out[10]: 20978

```
In [11]: Local_ratio=N2/N22  
Local_ratio
```

Out[11]: 0.03775383735341787

```
In [12]: higher_parking_proportion=Local_ratio>Global_ratio  
higher_parking_proportion
```

Out[12]: False

In []: