In [2]:

import pandas as pd
import numpy as np
df = pd.read_csv("AB_NYC_2019.csv")
df.head(10)

Out[2]: id name host_id host_name neighbourhood_group neighbourhood latitude longitude room_type price minimum_nights num Clean & quiet Private Kensington 40.64749 -73.97237 0 2539 apt home by the 2787 John Brooklyn 149 1 room park Skylit Midtown Entire **1** 2595 2845 Jennifer Manhattan Midtown 40.75362 -73.98377 225 Castle home/apt THE VILLAGE OF Private 2 3647 4632 150 3 Harlem 40.80902 -73.94190 Elisabeth Manhattan HARLEM....NEW room YORK! Cozy Entire Entire 3 3831 Floor of 4869 LisaRoxanne Brooklyn Clinton Hill 40.68514 -73.95976 89 home/apt Brownstone Entire Apt: Spacious Entire 4 5022 7192 Laura Manhattan East Harlem 40.79851 -73.94399 80 10 Studio/Loft by home/apt central park Large Cozy 1 BR Entire Murray Hill 40.74767 -73.97500 **5** 5099 Apartment In 7322 Chris Manhattan 200 3 home/apt Midtown East Bedford-Private 40.68688 -73.95596 **6** 5121 BlissArtsSpace! 7356 Garon 60 45 Brooklyn Stuvvesant room Large Furnished Private **7** 5178 Room Near 8967 Shunichi Manhattan Hell's Kitchen 40.76489 -73.98493 79 2 room B'way Cozy Clean Private **Upper West** 8 5203 Guest Room -7490 MaryEllen Manhattan 40.80178 -73.96723 79 2 Side room Family Apt Cute & Cozy Entire Lower East Side Chinatown 40.71344 -73.99037 150 9 5238 7549 Ben Manhattan home/apt 1 bdrm

```
In [ ]:
            df.shape
In [22]:
           (48895, 17)
Out[22]:
In [23]:
            df.describe()
                                     host_id
                                                              longitude
                                                                               price minimum_nights number_of_reviews reviews_per_month calculated_
Out[23]:
                            id
                                                  latitude
           count 4.889500e+04
                                4.889500e+04
                                             48895.000000
                                                           48895.000000
                                                                        48895.000000
                                                                                         48895.000000
                                                                                                            48895.000000
                                                                                                                              38843.000000
           mean
                 1.901714e+07 6.762001e+07
                                                40.728949
                                                             -73.952170
                                                                          152.720687
                                                                                             7.029962
                                                                                                               23.274466
                                                                                                                                   1.373221
                  1.098311e+07 7.861097e+07
                                                 0.054530
                                                              0.046157
                                                                          240.154170
                                                                                            20.510550
                                                                                                               44.550582
                                                                                                                                  1.680442
                  2.539000e+03
                               2.438000e+03
                                                40.499790
                                                             -74.244420
                                                                            0.000000
                                                                                             1.000000
                                                                                                                0.000000
                                                                                                                                  0.010000
                  9.471945e+06 7.822033e+06
                                                40.690100
                                                             -73.983070
                                                                           69.000000
                                                                                             1.000000
                                                                                                                1.000000
                                                                                                                                  0.190000
            25%
                 1.967728e+07
                               3.079382e+07
                                                40.723070
                                                             -73.955680
                                                                          106.000000
                                                                                             3.000000
                                                                                                                5.000000
                                                                                                                                  0.720000
            75%
                  2.915218e+07 1.074344e+08
                                                40.763115
                                                             -73.936275
                                                                          175.000000
                                                                                             5.000000
                                                                                                               24.000000
                                                                                                                                  2.020000
            max 3.648724e+07 2.743213e+08
                                                40.913060
                                                             -73.712990
                                                                        10000.000000
                                                                                          1250.000000
                                                                                                              629.000000
                                                                                                                                  58.500000
In [13]:
           max_qua = df.price.quantile(0.95)
            max qua
           355.0
Out[13]:
            min qua = df.price.quantile(0.05)
In [14]:
            min_qua
In [15]:
Out[15]:
           40.0
            ss = df[(df["price"]<max_qua)&(df["price"]>min_qua)]
```

```
ss["price"]
In [18]:
           0
                      149
Out[18]:
                      225
                      150
           3
                        89
                        80
                     . . .
                       65
           48889
           48890
                        70
           48892
                      115
           48893
                        55
           48894
                        90
           Name: price, Length: 43631, dtype: int64
            ss.shape
In [19]:
           (43631, 17)
Out[19]:
In [20]:
            df.shape
           (48895, 17)
Out[20]:
            df[(df["price"]>max qua)|(df["price"]<min qua)]</pre>
In [21]:
Out[21]:
                          id
                                        name
                                                  host_id host_name neighbourhood_group neighbourhood
                                                                                                              latitude longitude room_type
                                                                                                                                            price minimum
                              Clean and Quiet in
                                                                                                   Bedford-
                                                                                                                                     Private
                      11452
               36
                                                    7355
                                                                   Vt
                                                                                                             40.68876 -73.94312
                                                                                                                                               35
                                                                                   Brooklyn
                                      Brooklyn
                                                                                                 Stuyvesant
                                                                                                                                      room
                              Sunny & Spacious
                                                                                                                                      Entire
                      15396
                                                                                                                                              375
               61
                                                   60278
                                                                Petra
                                                                                  Manhattan
                                                                                                   Chelsea
                                                                                                            40.74623 -73.99530
                             Chelsea Apartment
                                                                                                                                   home/apt
                              perfect for a family
                                                                                                   Brooklyn
                                                                                                                                      Entire
                                                                                                                                              800
               85
                      19601
                                                   74303
                                                              Maggie
                                                                                   Brooklyn
                                                                                                             40.69723 -73.99268
                                 or small group
                                                                                                    Heights
                                                                                                                                   home/apt
                              2000 SF 3br 2bath
                                                                                                                                      Entire
              103
                      23686
                                   West Village
                                                   93790
                                                                                  Manhattan
                                                                                                West Village 40.73096 -74.00319
                                                                                                                                              500
                                                                 Ann
                                                                                                                                   home/apt
                              private townhouse
                                  3 Story Town
                                                                                                                                      Entire
              121
                      27659
                                 House in Park
                                                   119588
                                                                 Vero
                                                                                   Brooklyn
                                                                                                 South Slope 40.66499 -73.97925
                                                                                                                                              400
                                                                                                                                   home/apt
                                        Slope
```

	id	name	host_id	host_name	neighbourhood_group	neighbourhood	latitude	longitude	room_type	price	minimum
48851	36455649	#7 New Hotel-Like Private Room KING bed near JFK	263504959	David	Queens	Woodhaven	40.69137	-73.86591	Private room	35	
48852	36455809	Cozy Private Room in Bushwick, Brooklyn	74162901	Christine	Brooklyn	Bushwick	40.69805	-73.92801	Private room	30	
48867	36473044	The place you were dreaming for. (only for guys)	261338177	Diana	Brooklyn	Gravesend	40.59080	-73.97116	Shared room	25	
48868	36473253	Heaven for you(only for guy)	261338177	Diana	Brooklyn	Gravesend	40.59118	-73.97119	Shared room	25	
48871	36475746	A LARGE ROOM - 1 MONTH MINIMUM - WASHER&DRYER	144008701	Ozzy Ciao	Manhattan	Harlem	40.82233	-73.94687	Private room	35	

4483 rows × 17 columns

In []: