```
In [1]:
         import pandas as pd
         import numpy as np
        data=pd.read_csv(r"D:\Download2\HousePrice.csv")
In [2]:
In [3]:
         data
Out[3]:
                POSTED_BY UNDER_CONSTRUCTION RERA BHK_NO. BHK_OR_RK SQUARE_FT READ
                                                                2
             0
                      Owner
                                                0
                                                       0
                                                                          BHK
                                                                                1300.236407
             1
                      Dealer
                                                       0
                                                                2
                                                                          BHK
                                                                                1275.000000
             2
                                                0
                                                                2
                                                                          BHK
                                                                                 933.159722
                      Owner
                                                       0
              3
                                                                                 929.921143
                      Owner
                                                                          BHK
                                                                                 999.009247
             4
                      Dealer
                                                       0
                                                                2
                                                                          BHK
          29446
                                                0
                                                                3
                                                                          BHK
                                                                                2500.000000
                      Owner
                                                       0
                                                0
                                                                2
                                                                                 769.230769
          29447
                      Owner
                                                                          BHK
                                                       0
          29448
                      Dealer
                                                0
                                                       0
                                                                2
                                                                          BHK
                                                                                1022.641509
          29449
                      Owner
                                                0
                                                       0
                                                                2
                                                                          BHK
                                                                                 927.079009
                                                                                 896.774194
                                                                2
          29450
                      Dealer
                                                0
                                                       1
                                                                          BHK
         29451 rows × 12 columns
In [4]: data["POSTED_BY"].unique()
Out[4]: array(['Owner', 'Dealer', 'Builder'], dtype=object)
In [5]: | data["POSTED_BY"].replace("Owner",1,inplace=True)
In [6]: data["POSTED_BY"].replace("Dealer",0,inplace=True)
In [7]: data["POSTED_BY"].replace("Builder",2,inplace=True)
```

In [8]: data

Out[8]:

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ
0	1	0	0	2	BHK	1300.236407	
1	0	0	0	2	внк	1275.000000	
2	1	0	0	2	внк	933.159722	
3	1	0	1	2	внк	929.921143	
4	0	1	0	2	внк	999.009247	
29446	1	0	0	3	внк	2500.000000	
29447	1	0	0	2	внк	769.230769	
29448	0	0	0	2	ВНК	1022.641509	
29449	1	0	0	2	ВНК	927.079009	
29450	0	0	1	2	ВНК	896.774194	

29451 rows × 12 columns

In [9]: data["POSTED_BY"].unique()

Out[9]: array([1, 0, 2], dtype=int64)

```
In [10]: data.info()
```

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 29451 entries, 0 to 29450
Data columns (total 12 columns):

Column Non-Null Count Dtype _ _ _ 0 POSTED BY 29451 non-null int64 1 UNDER_CONSTRUCTION 29451 non-null int64 2 RERA 29451 non-null int64 3 29451 non-null int64 BHK NO. 4 BHK_OR_RK 29451 non-null object 5 SQUARE_FT 29451 non-null float64 29451 non-null int64 6 READY_TO_MOVE 29451 non-null int64 7 RESALE 29451 non-null object 8 **ADDRESS** 9 29451 non-null float64 LONGITUDE 10 LATITUDE 29451 non-null float64 11 TARGET(PRICE_IN_LACS) 29451 non-null float64

dtypes: float64(4), int64(6), object(2)

memory usage: 2.7+ MB

In [11]: data=pd.read_csv(r"D:\Download2\HousePrice.csv")
 data

Out[11]:

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ
0	Owner	0	0	2	ВНК	1300.236407	_
1	Dealer	0	0	2	ВНК	1275.000000	
2	Owner	0	0	2	ВНК	933.159722	
3	Owner	0	1	2	ВНК	929.921143	
4	Dealer	1	0	2	ВНК	999.009247	
•••							
29446	Owner	0	0	3	ВНК	2500.000000	
29447	Owner	0	0	2	внк	769.230769	
29448	Dealer	0	0	2	ВНК	1022.641509	
29449	Owner	0	0	2	ВНК	927.079009	
29450	Dealer	0	1	2	внк	896.774194	

29451 rows × 12 columns

```
In [12]: a1=data["POSTED_BY"].str.replace("Own","self")
Out[12]: 0
                   selfer
                   Dealer
         2
                   selfer
         3
                   selfer
         4
                  Dealer
                    . . .
         29446
                   selfer
                  selfer
         29447
         29448
                  Dealer
                   selfer
         29449
         29450
                  Dealer
         Name: POSTED_BY, Length: 29451, dtype: object
In [13]: data=pd.read_csv(r"D:\Download2\HousePrice.csv")
         data
```

Out[13]:

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ
0	Owner	0	0	2	ВНК	1300.236407	
1	Dealer	0	0	2	внк	1275.000000	
2	Owner	0	0	2	внк	933.159722	
3	Owner	0	1	2	внк	929.921143	
4	Dealer	1	0	2	внк	999.009247	
29446	Owner	0	0	3	ВНК	2500.000000	
29447	Owner	0	0	2	внк	769.230769	
29448	Dealer	0	0	2	ВНК	1022.641509	
29449	Owner	0	0	2	ВНК	927.079009	
29450	Dealer	0	1	2	ВНК	896.774194	

29451 rows × 12 columns

In [14]: data["POSTED_BY"]=data["POSTED_BY"].str.replace("Own","self")
data

Out[14]:

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ'
0	selfer	0	0	2	внк	1300.236407	
1	Dealer	0	0	2	внк	1275.000000	
2	selfer	0	0	2	внк	933.159722	
3	selfer	0	1	2	внк	929.921143	
4	Dealer	1	0	2	внк	999.009247	
29446	selfer	0	0	3	внк	2500.000000	
29447	selfer	0	0	2	внк	769.230769	
29448	Dealer	0	0	2	внк	1022.641509	
29449	selfer	0	0	2	ВНК	927.079009	
29450	Dealer	0	1	2	ВНК	896.774194	

29451 rows × 12 columns

```
In [15]: old_str=input("Enter the value....")
New_str=input("Enter the new values.....")
data["POSTED_BY"]=data["POSTED_BY"].str.replace(old_str,New_str)
```

Enter the value.... Dealer Enter the new values.....broker

In [16]: data

Out[16]:

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ
0	selfer	0	0	2	ВНК	1300.236407	_
1	broker	0	0	2	внк	1275.000000	
2	selfer	0	0	2	внк	933.159722	
3	selfer	0	1	2	внк	929.921143	
4	broker	1	0	2	внк	999.009247	
29446	selfer	0	0	3	внк	2500.000000	
29447	selfer	0	0	2	ВНК	769.230769	
29448	broker	0	0	2	ВНК	1022.641509	
29449	selfer	0	0	2	ВНК	927.079009	
29450	broker	0	1	2	ВНК	896.774194	

29451 rows × 12 columns

How to Make Round of Value

```
In [17]: | np.round(data["SQUARE_FT"],2)
Out[17]: 0
                   1300.24
         1
                   1275.00
         2
                    933.16
         3
                    929.92
                    999.01
                   2500.00
         29446
         29447
                   769.23
         29448
                   1022.64
         29449
                    927.08
         29450
                    896.77
         Name: SQUARE_FT, Length: 29451, dtype: float64
In [18]: data["SQUARE_FT"]=np.round(data["SQUARE_FT"])
```

In [19]: data

Out[19]:

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ
0	selfer	0	0	2	ВНК	1300.0	
1	broker	0	0	2	внк	1275.0	
2	selfer	0	0	2	внк	933.0	
3	selfer	0	1	2	ВНК	930.0	
4	broker	1	0	2	ВНК	999.0	
29446	selfer	0	0	3	ВНК	2500.0	
29447	selfer	0	0	2	ВНК	769.0	
29448	broker	0	0	2	ВНК	1023.0	
29449	selfer	0	0	2	ВНК	927.0	
29450	broker	0	1	2	ВНК	897.0	

29451 rows × 12 columns

In [20]: data=np.round(data,2)

In [21]: data

Out[21]:

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ
0	selfer	0	0	2	ВНК	1300.0	
1	broker	0	0	2	внк	1275.0	
2	selfer	0	0	2	ВНК	933.0	
3	selfer	0	1	2	ВНК	930.0	
4	broker	1	0	2	внк	999.0	
29446	selfer	0	0	3	ВНК	2500.0	
29447	selfer	0	0	2	внк	769.0	
29448	broker	0	0	2	ВНК	1023.0	
29449	selfer	0	0	2	ВНК	927.0	
29450	broker	0	1	2	ВНК	897.0	

29451 rows × 12 columns

Out[22]: 12.35

How to work with For Loop when dataset we have...

```
In [23]: for x in range(3):
          print(x)

0
1
```

2

```
In [24]: for x in data["POSTED_BY"]:
              print(x)
          <u>שבו בו</u>
          broker
          broker
          broker
          selfer
          broker
          selfer
          broker
          selfer
          selfer
          selfer
          broker
          selfer
          broker
          selfer
          broker
          selfer
          broker
          selfer
          selfer
In [25]: data["POSTED_BY"].unique()
Out[25]: array(['selfer', 'broker', 'Builder'], dtype=object)
In [26]:
          ab=[]
          for x in data["POSTED_BY"]:
              if x=="broker":
                  ab.append(1)
              elif x=="selfer":
                  ab.append(2)
              else:
                  ab.append(3)
```

```
In [29]: ab
             1,
             1,
             2,
             1,
             1,
             2,
             1,
             1,
             1,
             2,
             1,
             1,
             1,
             1,
             2,
```

Out[30]:

In [30]: data

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ'
0	selfer	0	0	2	внк	1300.0	
1	broker	0	0	2	внк	1275.0	
2	selfer	0	0	2	ВНК	933.0	
3	selfer	0	1	2	внк	930.0	
4	broker	1	0	2	ВНК	999.0	
29446	selfer	0	0	3	внк	2500.0	
29447	selfer	0	0	2	ВНК	769.0	
29448	broker	0	0	2	ВНК	1023.0	
29449	selfer	0	0	2	ВНК	927.0	
29450	broker	0	1	2	внк	897.0	
29451	rows × 12 colu	umns					
4							•

Create a new column in current dataset

```
In [31]: data["Frenchise"]=ab
```

In [32]: data

Out[32]:

	POSTED_BY	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READ
0	selfer	0	0	2	ВНК	1300.0	
1	broker	0	0	2	внк	1275.0	
2	selfer	0	0	2	внк	933.0	
3	selfer	0	1	2	внк	930.0	
4	broker	1	0	2	ВНК	999.0	
	•••			•••	•••		
29446	selfer	0	0	3	внк	2500.0	
29447	selfer	0	0	2	ВНК	769.0	
29448	broker	0	0	2	внк	1023.0	
29449	selfer	0	0	2	ВНК	927.0	
29450	broker	0	1	2	ВНК	897.0	
29451	rows × 13 colu	ımns					
4							•

In [33]: data.insert(1,"French_Owner",ab)

In [34]: data

Out[34]:

	POSTED_BY	French_Owner	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQU
0	selfer	2	0	0	2	ВНК	
1	broker	1	0	0	2	внк	
2	selfer	2	0	0	2	внк	
3	selfer	2	0	1	2	внк	
4	broker	1	1	0	2	внк	
29446	selfer	2	0	0	3	внк	
29447	selfer	2	0	0	2	ВНК	
29448	broker	1	0	0	2	ВНК	
29449	selfer	2	0	0	2	внк	
29450	broker	1	0	1	2	ВНК	
29451 r	rows × 14 colu	ımns					
4							•

How to remove col from dataset

In [35]: del data['POSTED_BY']

In [36]: data

Out[36]:

_		French_Owner	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	REA
_	0	2	0	0	2	ВНК	1300.0	
	1	1	0	0	2	внк	1275.0	
	2	2	0	0	2	внк	933.0	
	3	2	0	1	2	внк	930.0	
	4	1	1	0	2	внк	999.0	
	29446	2	0	0	3	внк	2500.0	
	29447	2	0	0	2	внк	769.0	
	29448	1	0	0	2	ВНК	1023.0	
	29449	2	0	0	2	ВНК	927.0	
	29450	1	0	1	2	ВНК	897.0	

29451 rows × 13 columns

In [37]: del data['French_Owner']

In [38]: data

Out[38]:

	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READY_TO_MOVE I
0	0	0	2	ВНК	1300.0	1
1	0	0	2	внк	1275.0	1
2	0	0	2	внк	933.0	1
3	0	1	2	внк	930.0	1
4	1	0	2	внк	999.0	0
29446	0	0	3	внк	2500.0	1
29447	0	0	2	внк	769.0	1
29448	0	0	2	ВНК	1023.0	1
29449	0	0	2	ВНК	927.0	1
29450	0	1	2	внк	897.0	1

29451 rows × 12 columns

```
In [39]: data["Frenchise"].value_counts()
```

Out[39]: 1 18291

2 10538

3 622

Name: Frenchise, dtype: int64

```
In [40]: dataset=data.drop('LATITUDE',1)
```

C:\Users\Sai\AppData\Local\Temp\ipykernel_11268\3908617382.py:1: FutureWarning: In a future version of pandas all arguments of DataFrame.drop except for the argument 'labels' will be keyword-only.

dataset=data.drop('LATITUDE',1)

In [41]: dataset

Out[41]:

	UNDER_CONSTRUCTION	RERA	BHK_NO.	BHK_OR_RK	SQUARE_FT	READY_TO_MOVE I
0	0	0	2	ВНК	1300.0	1
1	0	0	2	внк	1275.0	1
2	0	0	2	внк	933.0	1
3	0	1	2	внк	930.0	1
4	1	0	2	внк	999.0	0
29446	0	0	3	внк	2500.0	1
29447	0	0	2	внк	769.0	1
29448	0	0	2	ВНК	1023.0	1
29449	0	0	2	ВНК	927.0	1
29450	0	1	2	ВНК	897.0	1

29451 rows × 11 columns

In []: