load the dataset

```
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
path="/content/House Price India.csv"
df=pd.read_csv(path)
```

Loat the Dataset

```
df.info()
df.head()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 14620 entries, 0 to 14619
Data columns (total 23 columns):
 #   Column                                Non-Null Count  Dtype  
---  ------                                --------------  -----  
 0   id                                    14620 non-null  int64  
 1   Date                                  14620 non-null  int64  
 2   number of bedrooms                    14620 non-null  int64  
 3   number of bathrooms                   14620 non-null  float64
 4   living area                           14620 non-null  int64  
 5   lot area                              14620 non-null  int64  
 6   number of floors                      14620 non-null  float64
 7   waterfront present                    14620 non-null  int64  
 8   number of views                       14620 non-null  int64  
 9   condition of the house                14620 non-null  int64  
 10  grade of the house                    14620 non-null  int64  
 11  Area of the house(excluding basement) 14620 non-null  int64  
 12  Area of the basement                  14620 non-null  int64  
 13  Built Year                            14620 non-null  int64  
 14  Renovation Year                       14620 non-null  int64  
 15  Postal Code                           14620 non-null  int64  
 16  Lattitude                             14620 non-null  float64
 17  Longitude                             14620 non-null  float64
 18  living_area_renov                     14620 non-null  int64  
 19  lot_area_renov                        14620 non-null  int64  
 20  Number of schools nearby              14620 non-null  int64  
 21  Distance from the airport             14620 non-null  int64  
 22  Price                                 14620 non-null  int64  
dtypes: float64(4), int64(19)
memory usage: 2.6 MB
```

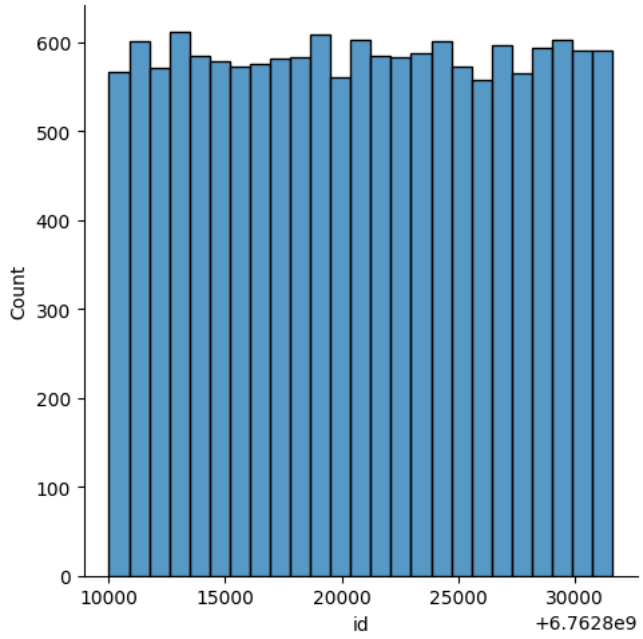
	id	Date	number of bedrooms	number of bathrooms	living area	lot area	number of floors	waterfront present	number of views
0	6762810145	42491	5	2.50	3650	9050	2.0	0	4
1	6762810635	42491	4	2.50	2920	4000	1.5	0	0
2	6762810998	42491	5	2.75	2910	9480	1.5	0	0
3	6762812605	42491	4	2.50	3310	42998	2.0	0	0
4	6762812919	42491	3	2.00	2710	4500	1.5	0	0

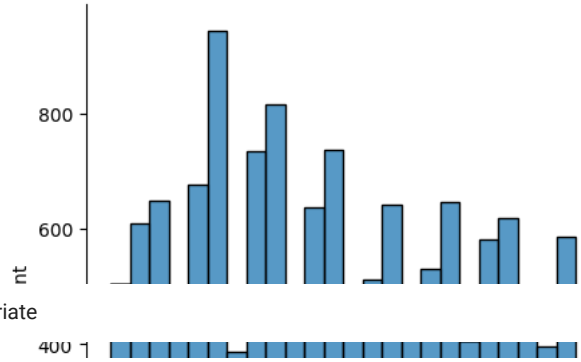
5 rows × 23 columns

Univariate

```
sns.displot(df.id)
sns.displot(df.Date)
```

```
<seaborn.axisgrid.FacetGrid at 0x7f7e31479a90>
```

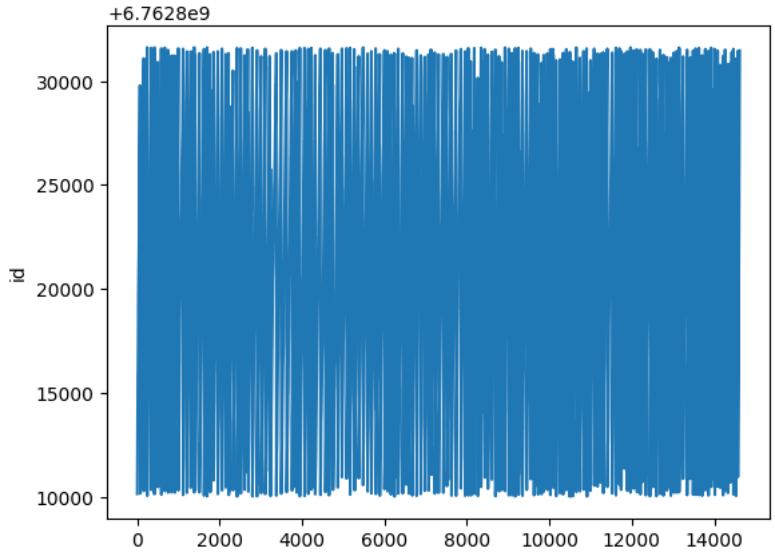




Bi-variate

```
sns.lineplot(df.id)
```

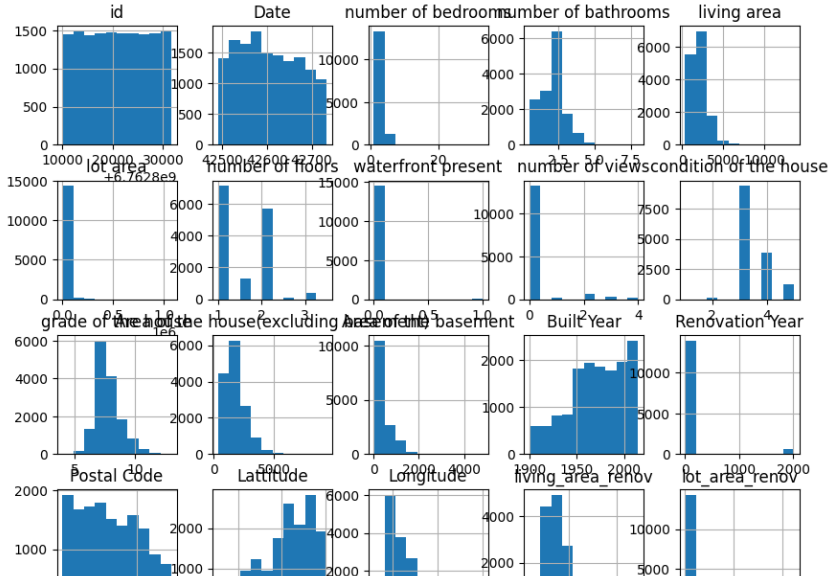
```
<Axes: ylabel='id'>
```



Multivariate

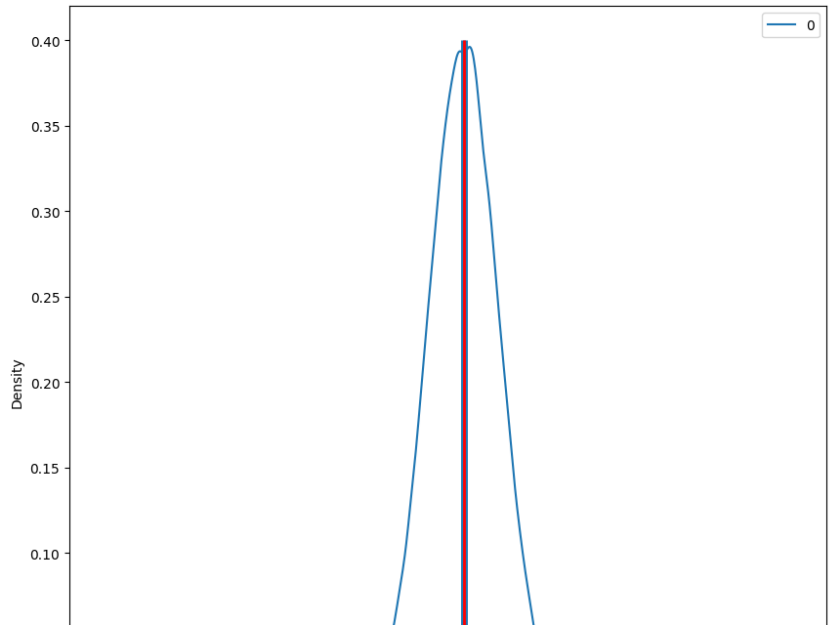
```
df.hist(figsize=(10,10))
```

```
array([[<Axes: title={'center': 'id'}>, <Axes: title={'center': 'Date'}>,
        <Axes: title={'center': 'number of bedrooms'}>,
        <Axes: title={'center': 'number of bathrooms'}>,
        <Axes: title={'center': 'living area'}>],
       [<Axes: title={'center': 'lot area'}>,
        <Axes: title={'center': 'number of floors'}>,
        <Axes: title={'center': 'waterfront present'}>,
        <Axes: title={'center': 'number of views'}>,
        <Axes: title={'center': 'condition of the house'}>],
       [<Axes: title={'center': 'grade of the house'}>,
        <Axes: title={'center': 'Area of the house(excluding basement)'}>,
        <Axes: title={'center': 'Area of the basement'}>,
        <Axes: title={'center': 'Built Year'}>,
        <Axes: title={'center': 'Renovation Year'}>],
       [<Axes: title={'center': 'Postal Code'}>,
        <Axes: title={'center': 'Lattitude'}>,
        <Axes: title={'center': 'Longitude'}>,
        <Axes: title={'center': 'living_area_renov'}>,
        <Axes: title={'center': 'lot_area_renov'}>],
       [<Axes: title={'center': 'Number of schools nearby'}>,
        <Axes: title={'center': 'Distance from the airport'}>,
        <Axes: title={'center': 'Price'}>, <Axes: >, <Axes: >]],
      dtype=object)
```



Perform Descriptive Statistics on the Dataset

```
df.mean()
df.median()
norm_df=pd.DataFrame(np.random.normal
                     (size=100000))
norm_df.plot(kind="density",
             figsize=(10,10));
plt.vlines(norm_df.mean(),
           ymin=0,
           ymax=0.4,
           linewidth=5.0);
plt.vlines(norm_df.median(),
           ymin=0,
           ymax=0.4,
           linewidth =2.0,
           color="red");
```



Handle the Missing value

```
df=pd.DataFrame(df)
df.isnull()
```

	id	Date	number of bedrooms	number of bathrooms	living area	lot area	number of floors	waterfront present	number of views
0	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False
...	...	...	...	...	...	...	...	...	...
14615	False	False	False	False	False	False	False	False	False
14616	False	False	False	False	False	False	False	False	False
14617	False	False	False	False	False	False	False	False	False
14618	False	False	False	False	False	False	False	False	False
14619	False	False	False	False	False	False	False	False	False

14620 rows × 23 columns

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