```
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)
```

## Load the dataset

df
df.info()
df.head()

C> <class 'pandas.core.frame.DataFrame'>
 RangeIndex: 14620 entries, 0 to 14619
 Data columns (total 23 columns):

	columns (total 23 columns):						
#	Column	Non-Null Count	, ,				
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)							

number number number number of living lot waterfront id Date of of of bathrooms area area present floors bedrooms views **0** 6762810145 42491 2.50 3650 9050 0 5 2.0 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



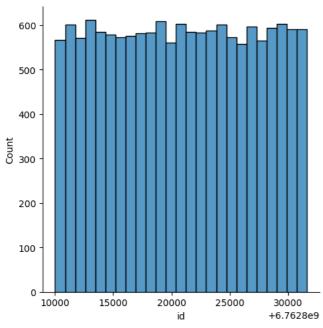
memory usage: 2.6 MB

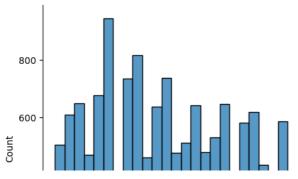
4

Univariate

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

<seaborn.axisgrid.FacetGrid at 0x7f445f443820>

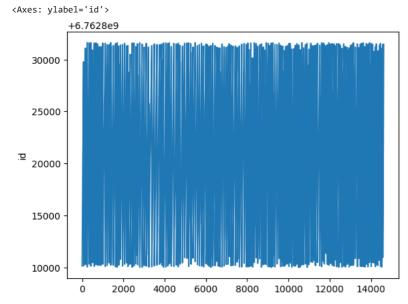




## New section

Bi- variate

sns.lineplot(df.id)

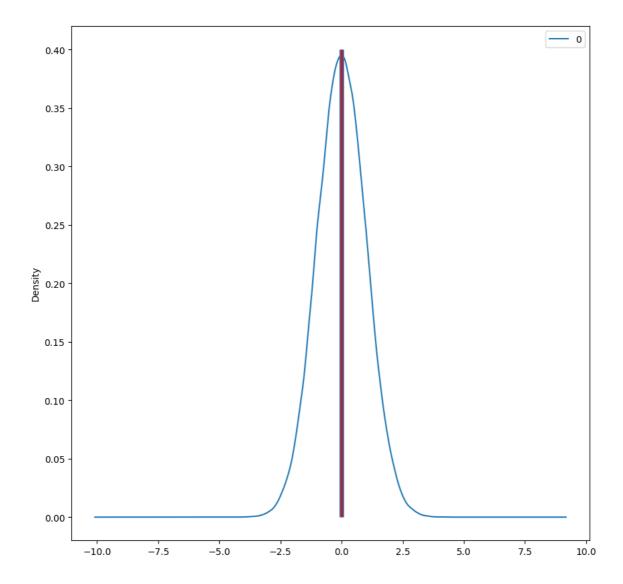


Multi variate

df.hist(figsize=(14,14))

```
array([[<Axes: title={'center': 'id'}>, <Axes: title={'center': 'Date'}>,
        <Axes: title={'center': 'number of bedrooms'}>,
        <Axes: title={'center':</pre>
                                 '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':</pre>
                                  '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': 'Price'}>, <Axes: >, <Axes: >]],
      dtvpe=object)
                 id
                                          Date
                                                             number of bedrooms
                                                                                        number of bathrooms
                                                                                                                        living area
  1500
                                                       12500
                                                                                   6000
                                                                                                              6000
                             1500
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  1000
                                                                                   4000
                                                        7500
                                                                                                              4000
                             1000
                                                        5000
   500
                                                                                   2000
                                                                                                              2000
                              500
                                                        2500
                                0
                                                                                      0
      10000
              20000
                       30000
                                 42500
                                         42600
                                                 42700
                                                                   10
                                                                        20
                                                                              30
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                                                                                                         7.5
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                                                              waterfront present
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                                                                                   2500
     0
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       0.0
                        1.0
                                                             0.0
                                                                      0.5
                                                                                1.0
        grade of the house@ea of the house(excluding basement) a of the basement
                                                                                              Built Year
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              7.5
                   10.0 12.5
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                                                                                       1900
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            Postal Code
                                        Lattitude
                                                                   Longitude
                                                                                          living area renov
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                                                                                                              2500
                                                                      -114.0
            20
                      60
                                  52.4 52.6 52.8 53.0
                                                               -114.5
                                                                              -113.5
                                                                                            2000
                                                                                                   4000
                                                                                                         6000
                                                                                                                        200000 400000
                 40
                                                                                                                    0
    Number of schools needs by Distance from the airport
                                                                     Price
  5000
                                                       12500
                             1500
  4000
                                                       10000
  3000
                                                        7500
                             1000
  2000
                                                        5000
  1000
                                                        2500
                                  50
                                        60
                                               70
                                                     80
                                                             0.0
                                                                   2.5
                                                                         5.0
                                                                                7.5
```

Perform Descriptive statistics on the Dataset



Handle the Missing Value

Double-click (or enter) to edit

```
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	condition of the house	•••	Built Year	Renovation Year	Postal Code	Lattit
0	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
1	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
2	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
3	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
4	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
14615	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
14616	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
14617	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
14618	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
14619	False	False	False	False	False	False	False	False	False	False		False	False	False	Fa
14620 rows × 23 columns															
<b>*</b>															

✓ 0s completed at 12:25