Import the Libraries

```
# importing required libraries

import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

Load the Dataset

```
# load the dataset
df = pd.read_csv('/House Price India.csv')
df.head()
```

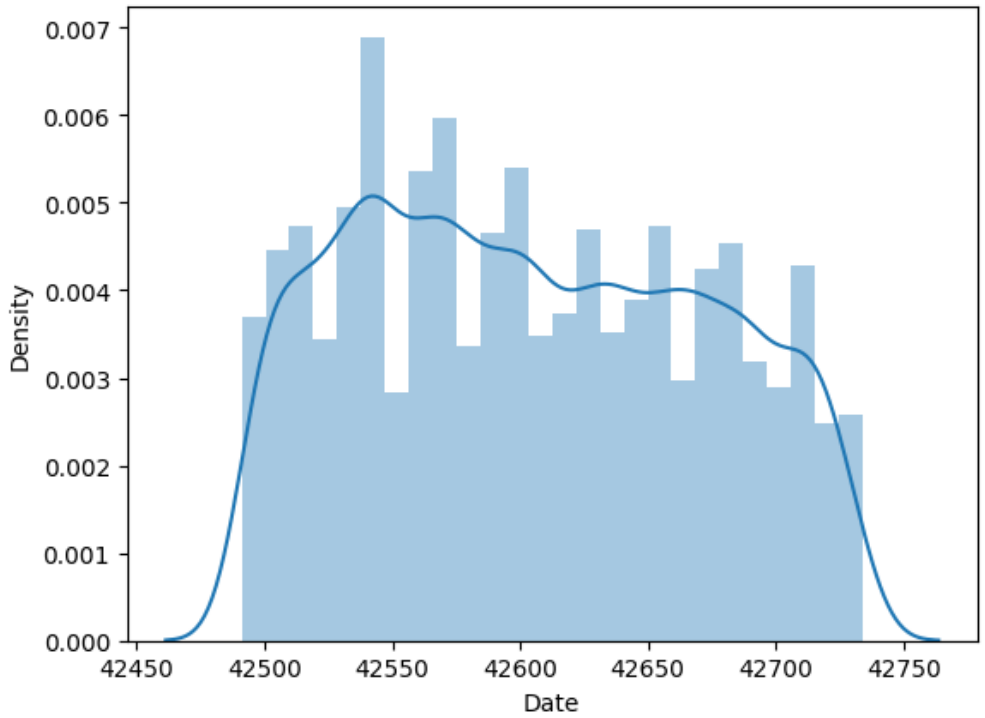
Univariate Analysis

```
sns.distplot(df.lot_area_renov)
```

```
<ipython-input-6-fbd8f64c04a5>:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(df.lot_area_renov)
```

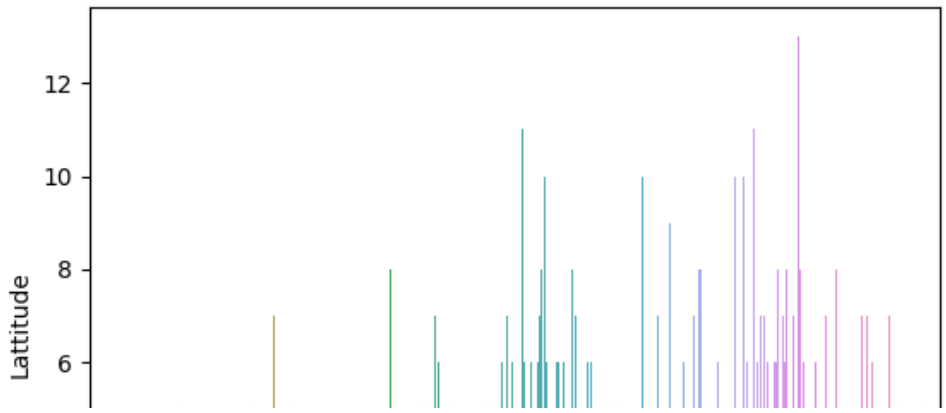
```
sns.distplot(df.Date)
```

```
<ipython-input-7-82d9cb3bf0f8>:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(df.Date)
<Axes: xlabel='Date', ylabel='Density'>
```




```
sns.barplot(x=df.Lattitude.value_counts().index,y=df.Lattitude.value_counts())
```

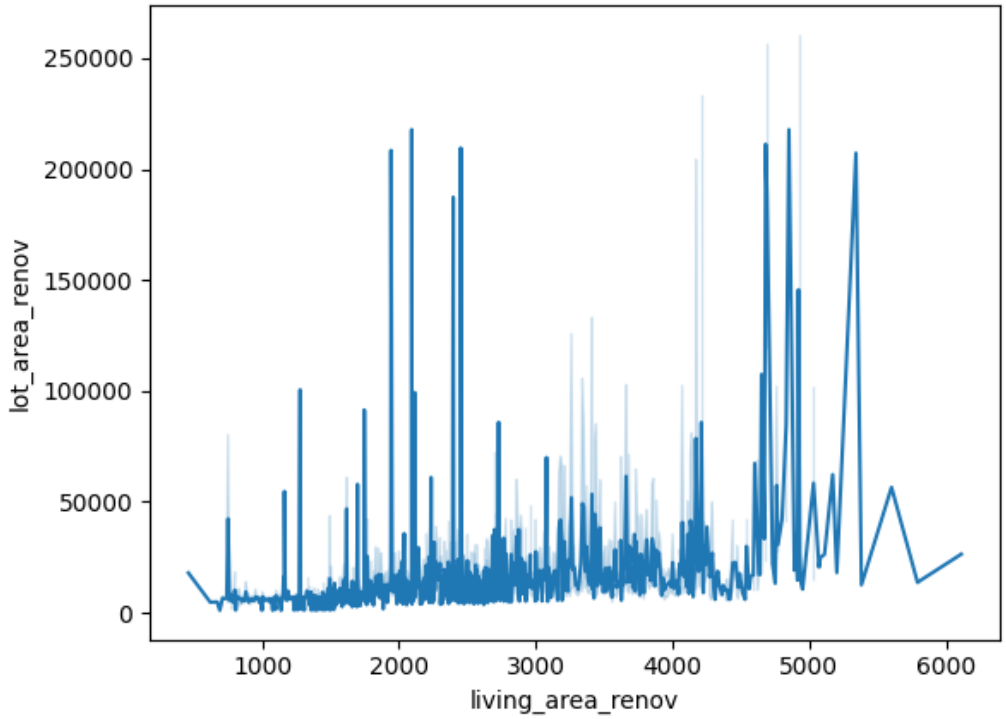
```
<Axes: ylabel='Lattitude'>
```



Bivariate Analysis

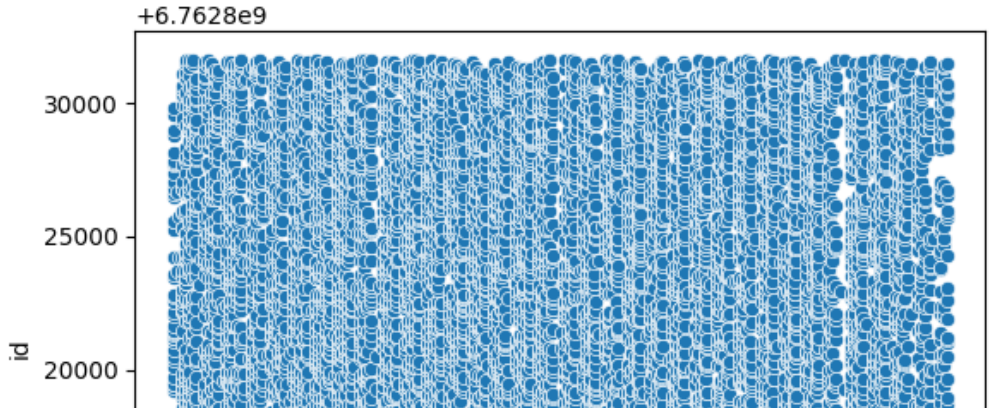
```
sns.lineplot(x=df.living_area_renov,y=df.lot_area_renov)
```

```
<Axes: xlabel='living_area_renov', ylabel='lot_area_renov'>
```




```
sns.scatterplot(x=df.Date,y=df.id)
```

```
<Axes: xlabel='Date', ylabel='id'>
```



Multivariate Analysis

```
sns.pairplot(df)
```

Descriptive statistics

```
# Display the descriptive statistics of the numerical variables in the dataframe
print(df.describe())
```

```
                 id          Date  number of bedrooms  number of bathrooms  \
count  1.462000e+04  14620.000000        14620.000000         14620.000000
mean   6.762821e+09  42604.538646            3.379343             2.129583
std    6.237575e+03     67.347991            0.938719             0.769934
min    6.762810e+09  42491.000000            1.000000             0.500000
25%    6.762815e+09  42546.000000            3.000000             1.750000
50%    6.762821e+09  42600.000000            3.000000             2.250000
75%    6.762826e+09  42662.000000            4.000000             2.500000
max    6.762832e+09  42734.000000           33.000000             8.000000

        living area      lot area  number of floors  waterfront present  \
count  14620.000000  1.462000e+04      14620.000000        14620.000000
mean    2098.262996  1.509328e+04          1.502360            0.007661
std      928.275721  3.791962e+04          0.540239            0.087193
min      370.000000  5.200000e+02          1.000000            0.000000
25%     1440.000000  5.010750e+03          1.000000            0.000000
50%     1930.000000  7.620000e+03          1.500000            0.000000
75%     2570.000000  1.080000e+04          2.000000            0.000000
max    13540.000000  1.074218e+06          3.500000            1.000000

       number of views  condition of the house  ...    Built Year  \
count     14620.000000            14620.000000  ...  14620.000000
mean          0.233105                3.430506  ...   1970.926402
std           0.766259                0.664151  ...     29.493625
min           0.000000                1.000000  ...   1900.000000
25%           0.000000                3.000000  ...   1951.000000
50%           0.000000                3.000000  ...   1975.000000
75%           0.000000                4.000000  ...   1997.000000
max           4.000000                5.000000  ...   2015.000000

       Renovation Year    Postal Code     Lattitude     Longitude  \
```

```
count     14620.000000   14620.000000  14620.000000  14620.000000
mean         90.924008  122033.062244     52.792848   -114.404007
std         416.216661      19.082418      0.137522      0.141326
min           0.000000  122003.000000     52.385900   -114.709000
25%           0.000000  122017.000000     52.707600   -114.519000
50%           0.000000  122032.000000     52.806400   -114.421000
75%           0.000000  122048.000000     52.908900   -114.315000
max        2015.000000  122072.000000     53.007600   -113.505000

       living_area_renov  lot_area_renov  Number of schools nearby  \
count       14620.000000    14620.000000               14620.000000
mean         1996.702257    12753.500068                   2.012244
std           691.093366    26058.414467                   0.817284
min           460.000000      651.000000                   1.000000
25%          1490.000000     5097.750000                   1.000000
50%          1850.000000     7620.000000                   2.000000
75%          2380.000000    10125.000000                   3.000000
max          6110.000000   560617.000000                   3.000000

       Distance from the airport         Price
count               14620.000000  1.462000e+04
mean                   64.950958  5.389322e+05
std                     8.936008  3.675324e+05
min                    50.000000  7.800000e+04
25%                    57.000000  3.200000e+05
50%                    65.000000  4.500000e+05
```

Handle the Missing values

```
# Check the number of missing values in the "living_area" column
print("Number of missing values in the living_area column:", df["living_area_renov"].isnull().sum())

# Fill the missing values with the mean value
df["living_area_renov"].fillna(df["living_area_renov"].mean(), inplace=True)

# Verify that there are no more missing values in the "living_area" column
print("Number of missing values in the living_area_renov column after filling:", df["living_area_renov"].isnu
```

```
Number of missing values in the living_area column: 0
Number of missing values in the living_area_renov column after filling: 0
```