1. Download the dataset: House Price India dataset is downloaded.

2. Load The dataset

```
[ ]: import pandas as pd
     import  matplotlib.pyplot  as  plt
     from matplotlib import rcParams
     import seaborn as sns
```

```
[ ]: df = pd.read_csv('/content/House Price India.csv')
     df.head()
```

```
[ ]:            id   Date  number_of_bedrooms  number of bathrooms  living_area  \
     0  6762810145  42491                   5                 2.50         3650
     1  6762810635  42491                   4                 2.50         2920
     2  6762810998  42491                   5                 2.75         2910
     3  6762812605  42491                   4                 2.50         3310
     4  6762812919  42491                   3                 2.00         2710

        lot_area  number_of_floors  waterfront present  number_of_views  \
     0      9050               2.0                   0                4
     1      4000               1.5                   0                0
     2      9480               1.5                   0                0
     3     42998               2.0                   0                0
     4      4500               1.5                   0                0

        condition of the house  …  Built Year  Renovation_Year  Postal_Code  \
     0                       5  …        1921                0       122003
     1                       5  …        1909                0       122004
     2                       3  …        1939                0       122004
     3                       3  …        2001                0       122005
     4                       4  …        1929                0       122006

        Lattitude  Longitude  living_area_renov  lot_area_renov  \
     0    52.8645   -114.557               2880            5400
     1    52.8878   -114.470               2470            4000
     2    52.8852   -114.468               2940            6600
     3    52.9532   -114.321               3350           42847
     4    52.9047   -114.485               2060            4500
```

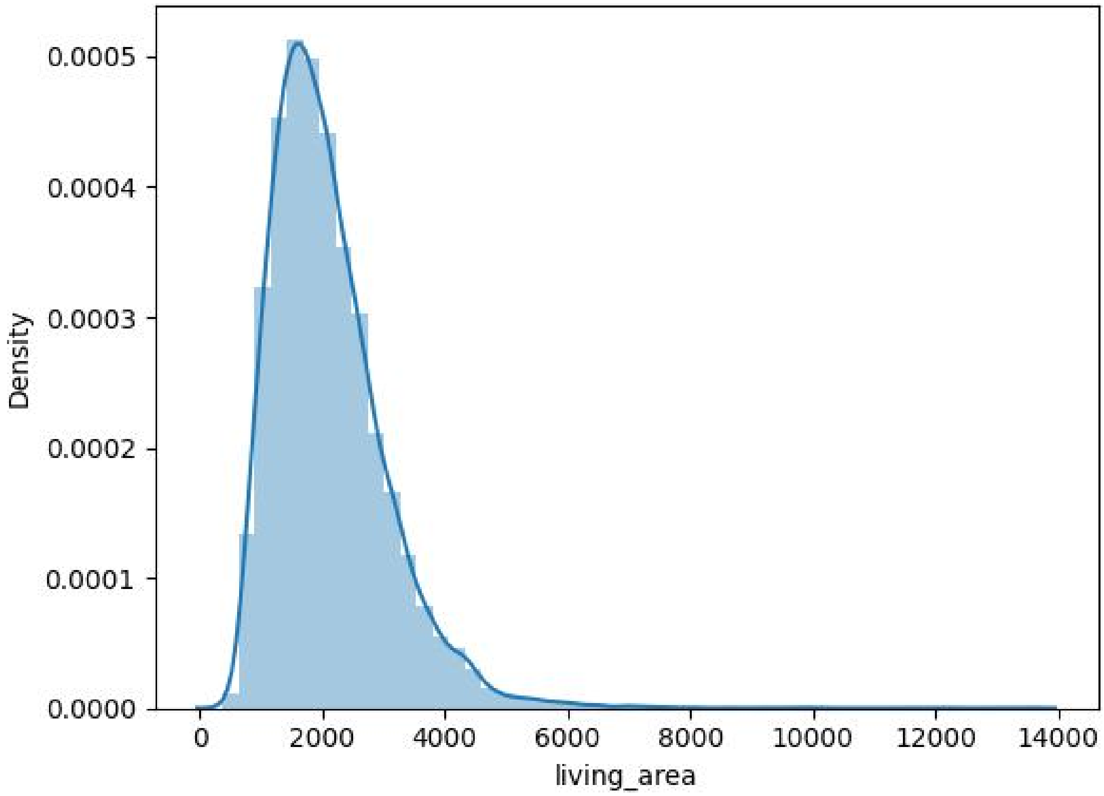
```
   Number_of_schools_nearby  Distance from the airport    Price
0                         2                         58  2380000
1                         2                         51  1400000
2                         1                         53  1200000
3                         3                         76   838000
4                         1                         51   805000

[5 rows x 23 columns]
```

3. Perform the Below Visualizations.   Univariate Analysis Bi - Variate Analysis Multivariate Analysis

```
[ ]: # Univariate Analysis (Analysis on single feature 'living area')

     sns.distplot(df.living_area)
```

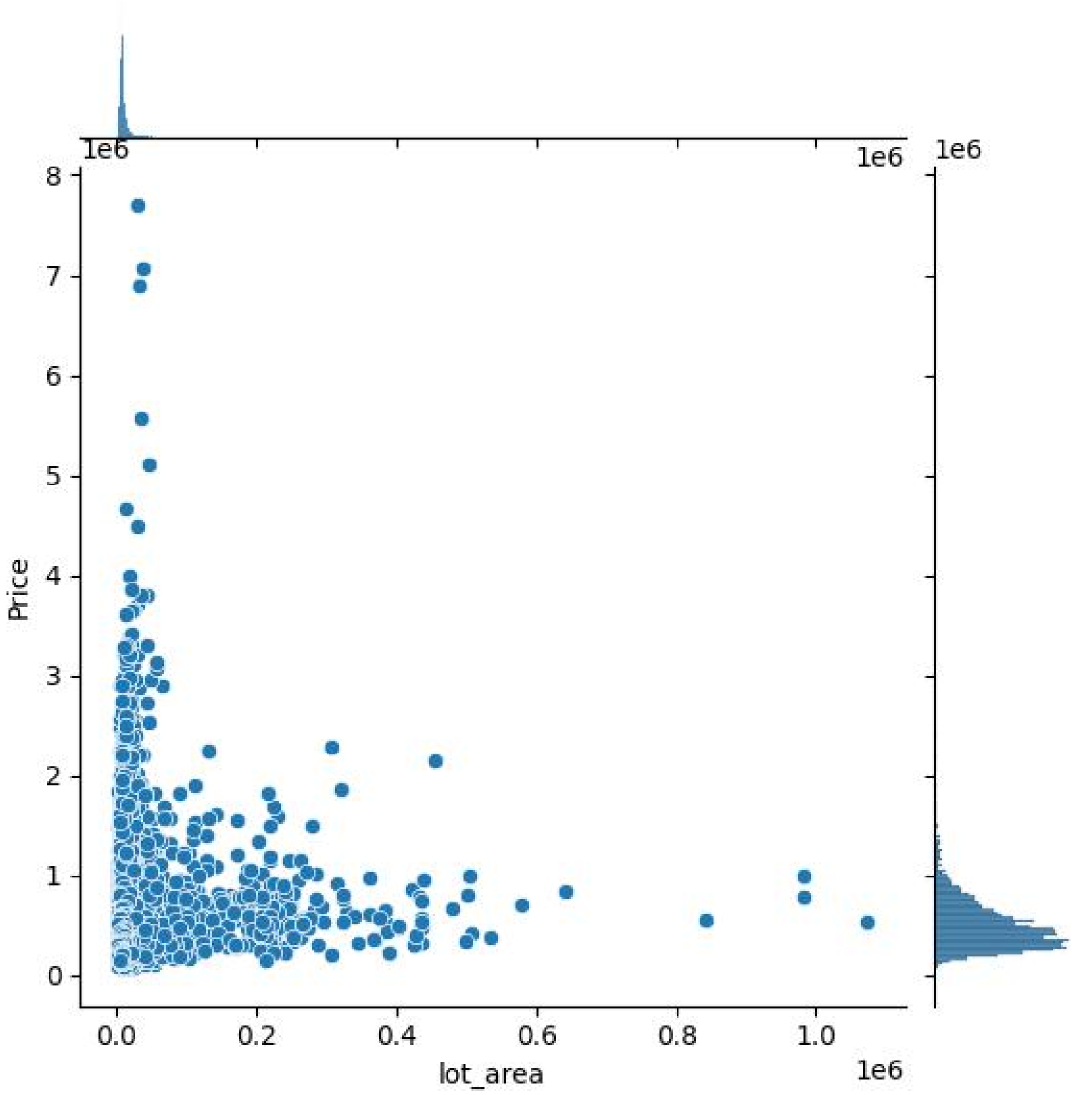
```
<ipython-input-3-99abb2f4025c>:3: UserWarning:

`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.living_area)
```

```
[ ]: <Axes: xlabel='living_area', ylabel='Density'>
```



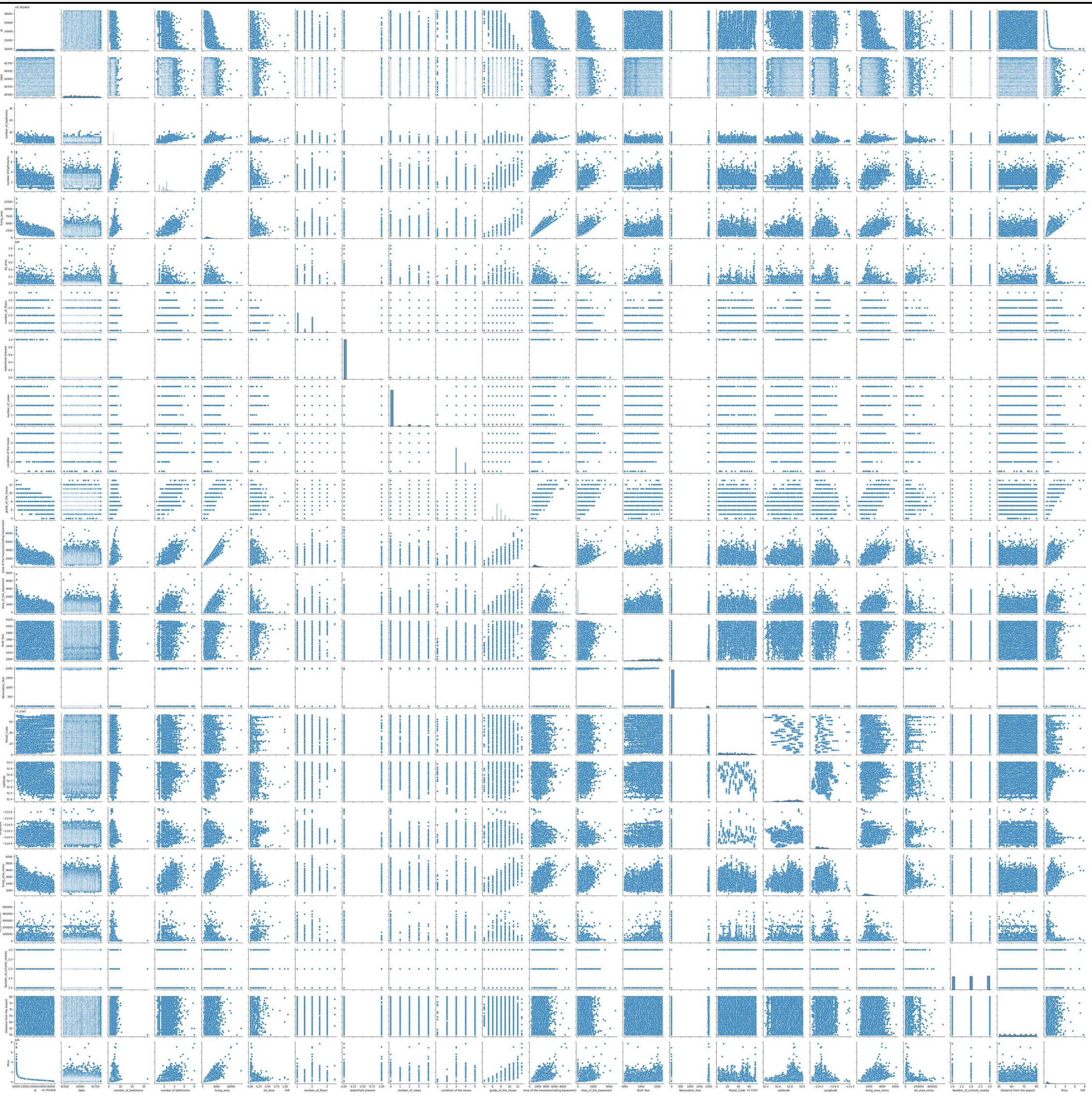
```
[ ]: # Bivariate Analysis (Comparision between 'lot_area' feature and 'Price')

     sns.jointplot(x='lot_area',y='Price',data=df)
```

```
[ ]: <seaborn.axisgrid.JointGrid at 0x7d7fa56bf370>
```



```
[ ]: # Multivariate analysis

     sns.pairplot(df)
```

```
[ ]: <seaborn.axisgrid.PairGrid at 0x7d7f63721f30>
```



4. Perform descriptive statistics on the dataset.

```
[ ]: 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
75%                     73.000000  6.450000e+05
max                     80.000000  7.700000e+06

[8 rows x 23 columns]
```

5. Handle the Missing values.

```
[ ]: df.isnull().any() #Checking is there any null values in our dataset
```

```
[ ]: id                                        False
     Date                                      False
     number_of_bedrooms                        False
     number of bathrooms                       False
     living_area                               False
     lot_area                                  False
     number_of_floors                          False
     waterfront present                        False
     number_of_views                           False
     condition of the house                    False
     grade_of_the_house                        False
     Area  of  the  house(excluding  basement) False
     Area_of_the_basement                      False
     Built Year                                False
     Renovation_Year                           False
     Postal_Code                               False
     Lattitude                                 False
     Longitude                                 False
     living_area_renov                         False
     lot_area_renov                            False
     Number_of_schools_nearby                  False
     Distance from the airport                 False
     Price                                     False
     dtype: bool
```

Conclusion : In the given dataset there are no null values.