

## ▼ NAME-SARTHAK MODAK

```
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
```

	id	Date	number_of_bedrooms	number_of_bathrooms	living_area	lot_area	number_of_floors	waterfront_presence
0	6762810145	42491		5	2.50	3650	9050	2.0
1	6762810635	42491		4	2.50	2920	4000	1.5
2	6762810998	42491		5	2.75	2910	9480	1.5
3	6762812605	42491		4	2.50	3310	42998	2.0
4	6762812919	42491		3	2.00	2710	4500	1.5
...	...	...		...	...	...	...	...
14615	6762830250	42734		2	1.50	1556	20000	1.0
14616	6762830339	42734		3	2.00	1680	7000	1.5
14617	6762830618	42734		2	1.00	1070	6120	1.0
14618	6762830709	42734		4	1.00	1030	6621	1.0
14619	6762831463	42734		3	1.00	900	4770	1.0

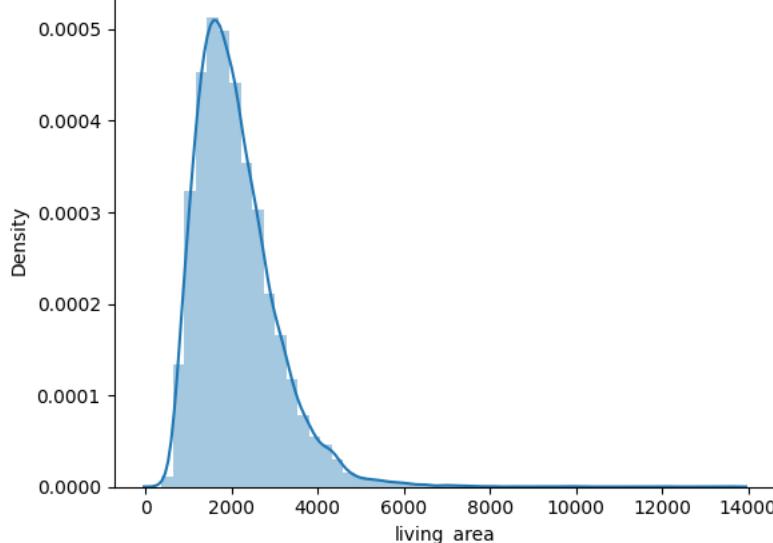
14620 rows × 23 columns

## ▼ Univariate Analysis

```
sns.distplot(df.living_area)

<ipython-input-3-2fe1fc3439c6>: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/de4147ed2974457ad6372750bbe5751
```

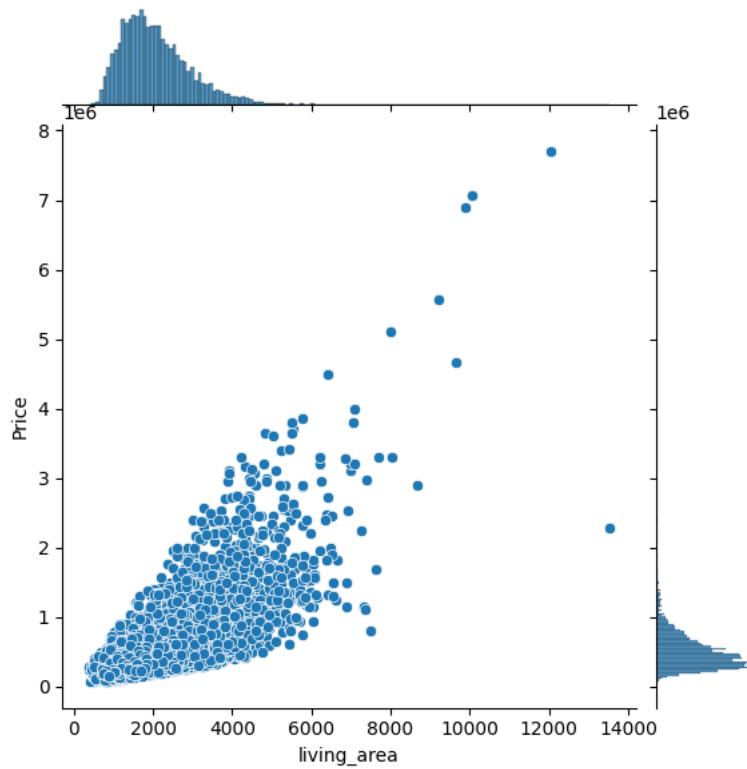
```
sns.distplot(df.living_area)
<Axes: xlabel='living_area', ylabel='Density'>
```



## ▼ Bi-Variate Analysis

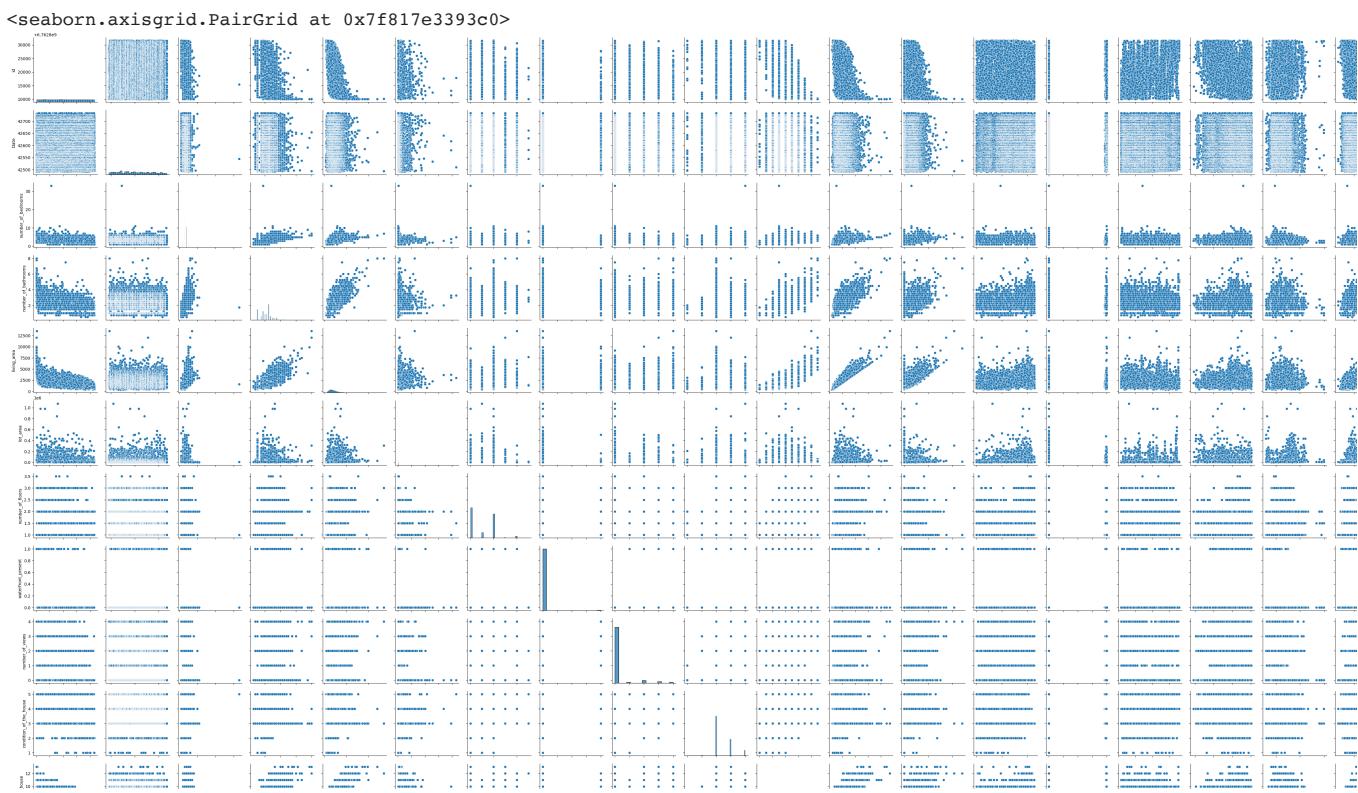
```
sns.jointplot(x='living_area',y='Price',data=df)
```

```
<seaborn.axisgrid.JointGrid at 0x7f81830acc40>
```



## ▼ Multivariate Analysis

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



```
df.describe()
```

	<b>id</b>	<b>Date</b>	<b>number_of_bedrooms</b>	<b>number_of_bathrooms</b>	<b>living_area</b>	<b>lot_area</b>	<b>number_of_floors</b>	<b>waterfr</b>
<b>count</b>	1.462000e+04	14620.000000	14620.000000	14620.000000	14620.000000	1.462000e+04	14620.000000	
<b>mean</b>	6.762821e+09	42604.538646		3.379343	2.129583	2098.262996	1.509328e+04	1.502360
<b>std</b>	6.237575e+03	67.347991		0.938719	0.769934	928.275721	3.791962e+04	0.540239
<b>min</b>	6.762810e+09	42491.000000		1.000000	0.500000	370.000000	5.200000e+02	1.000000
<b>25%</b>	6.762815e+09	42546.000000		3.000000	1.750000	1440.000000	5.010750e+03	1.000000
<b>50%</b>	6.762821e+09	42600.000000		3.000000	2.250000	1930.000000	7.620000e+03	1.500000
<b>75%</b>	6.762826e+09	42662.000000		4.000000	2.500000	2570.000000	1.080000e+04	2.000000
<b>max</b>	6.762832e+09	42734.000000		33.000000	8.000000	13540.000000	1.074218e+06	3.500000

8 rows × 23 columns



```
df.isnull().any()
```

<b>id</b>	False
<b>Date</b>	False
<b>number_of_bedrooms</b>	False
<b>number_of_bathrooms</b>	False
<b>living_area</b>	False
<b>lot_area</b>	False
<b>number_of_floors</b>	False
<b>waterfront_present</b>	False
<b>number_of_views</b>	False
<b>condition_of_the_house</b>	False
<b>grade_of_the_house</b>	False
<b>Area_of_the_house(excluding basement)</b>	False
<b>Area_of_the_basement</b>	False
<b>Built_Year</b>	False
<b>Renovation_Year</b>	False
<b>Postal_Code</b>	False
<b>Latitude</b>	False
<b>Longitude</b>	False
<b>living_area_renov</b>	False
<b>lot_area_renov</b>	False
<b>Number_of_schools_nearby</b>	False
<b>Distance_from_the_airport</b>	False
<b>Price</b>	False
<b>dtype: bool</b>	

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