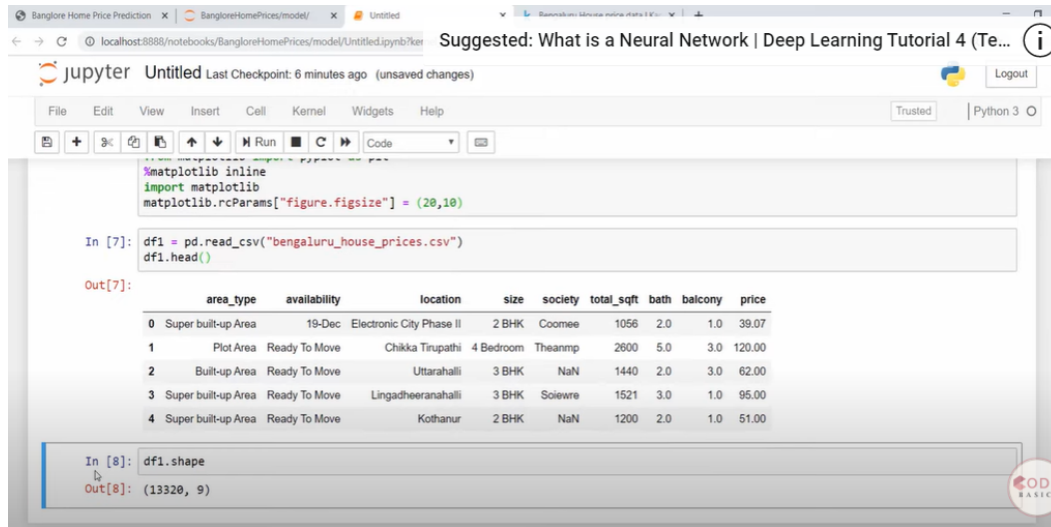


We found this cool video on youtube where he is doing data cleaning using different techniques on his real Estate Price Prediction Project. The following link can take you to that video. It shows the model built by sklearn and linear regression. The pandas data frames are loaded and then handled.

<https://www.youtube.com/watch?v=drqJ9SFCgU>

Some pictures from the videos are shown below which shows the different techniques used.



This screenshot shows a Jupyter Notebook interface with the following code and output:

```
%matplotlib inline
import matplotlib
matplotlib.rcParams["figure.figsize"] = (20,10)

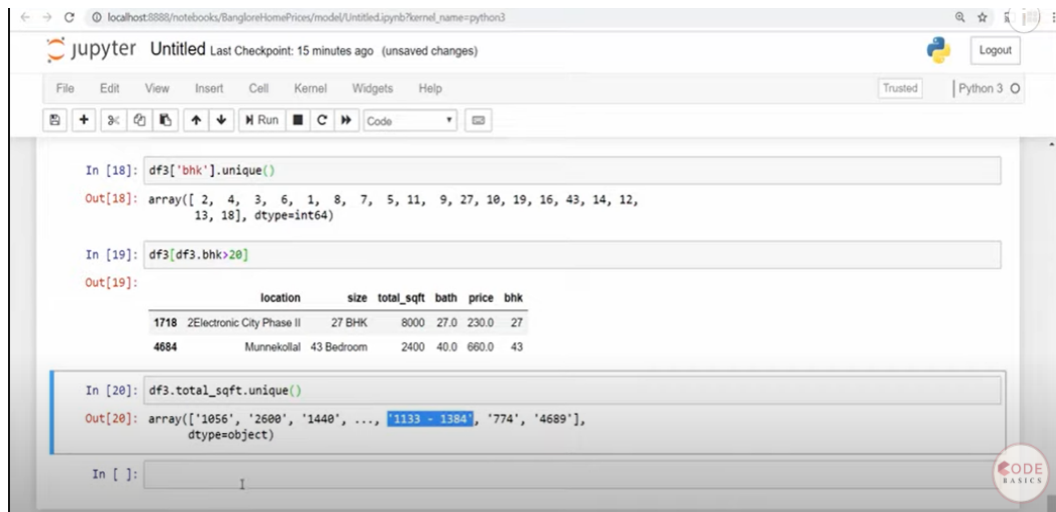
In [7]: df1 = pd.read_csv("bengaluru_house_prices.csv")
df1.head()
```

The output displays the first five rows of the dataset:

	area_type	availability	location	size	society	total_sqft	bath	balcony	price
0	Super built-up Area	19-Dec	Electronic City Phase II	2 BHK	Comee	1056	2.0	1.0	39.07
1	Plot Area	Ready To Move	Chikka Tirupathi	4 Bedroom	Theanmp	2600	5.0	3.0	120.00
2	Built-up Area	Ready To Move	Uttarahalli	3 BHK	NaN	1440	2.0	3.0	62.00
3	Super built-up Area	Ready To Move	Lingadheeranahalli	3 BHK	Soiewre	1521	3.0	1.0	95.00
4	Super built-up Area	Ready To Move	Kothanur	2 BHK	NaN	1200	2.0	1.0	51.00

Below this, the shape of the dataframe is checked:

```
In [8]: df1.shape
Out[8]: (13320, 9)
```



This screenshot shows the next steps in data cleaning:

```
In [18]: df3['bhk'].unique()
Out[18]: array([ 2,  4,  3,  6,  1,  8,  7,  5, 11,  9, 27, 10, 19, 16, 43, 14, 12,
        13, 18], dtype=int64)
```

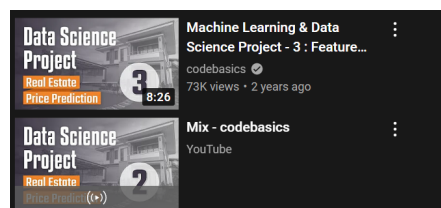
Then, rows with more than 20 BHKs are filtered out:

```
In [19]: df3[df3.bhk>20]
Out[19]:
```

	location	size	total_sqft	bath	price	bhk
1718	2Electronic City Phase II	27 BHK	8000	27.0	230.0	27
4684	Munnekollal	43 Bedroom	2400	40.0	660.0	43

Finally, the unique values for total_sqft are checked:

```
In [20]: df3.total_sqft.unique()
Out[20]: array(['1056', '2600', '1440', ..., '1133 - 1384', '774', '4689'],
        dtype=object)
```



Different high level visualization libraries were also used. Some of the interactive graphs were plotted using it.

