Date	18 November 2022
Team ID	PNT2022TMID13612
Project Name	Car Resale Value Prediction

Splitting Data into Independent and Dependent Variables:

```
X = car dataset.drop(['Car Name', 'Selling Price'], axis= 1)
Y = car dataset['Selling Price']
print(X)
output
          Year Present_Price Kms_Driven Fuel_Type Seller_Type Transmission \
0
     2014 5.59 27000
                            0
                                 0
     2013 9.54 43000
1
                            1
                                       0
     2017 9.85 6900 0 0 0 3 2011 4.15 5200 0 0 0 4 2014 6.87 42450 1 0 0 ...
     ... ... ... ... 296 2016 11.60 33988 1 0 0 297 2015 5.90 60000 0
     0 0
    2009 11.00
298
                      87934
                                       0
299
    2017 12.50
                      9000 1
                                 0
                                       0
    2016 5.90 5464 0
300
     Owner
0
    0 1
          0
2
         0
3
         0
         0
296
         0
297
         0
298
         0
299
         0
300
         0
[301 rows x 7 columns]
print(Y)
output :
0
        3.35
1
        4.75
```

```
2
         7.25
 3
         2.85
         4.60
        . . .
        9.50
 296
 297
         4.00
 298
         3.35
 299
        11.50
 300
         5.30
 Name: Selling Price, Length: 301, dtype: float64
 Spiltting the Training data and Test Data:
 X_train, X_test, Y_train, Y_test = train_test_split(X,Y,test_size = 0.1,random_state =
 print(X train)
 output :
         Year Present Price Kms Driven Fuel Type Seller Type Transmission \
204 2015
                    4.430
                                28282
                                                             0
                                               0
249 2016
                    7.600
                                17000
                                               0
                                                             0
                                                                           0
277 2015
                   13.600
                                21780
                                               0
                                                             0
                                                             1
194 2008
                    0.787
                                50000
                                               0
 244 2013 9.400
                       49000
                                  1
                                        0
                                              0 .. ...
75 2015
                    6.800
                                36000
                                               0
                                                             0
22 2011
                    8.010
                                50000
                                               0
                                                             0
                                                                           1
72 2013
                   18.610
                                56001
                                               0
                                                             0
 15 2016
                       43000
                                 1
                                        0 0 168 2013 0.730
           10.790
                                                                     12000
     0
           1
                0
 Owner
204
249
277
 194 0
                                   244 0
75
          0
          0
22
```

72

15 0

0

168 0

[270 rows x 7 columns]

Output :

	Year Presen	nt_Price K	ms_Driver	n Fuel	Type	Seller	_Type	Transı	nissio	n \
99 2010	20.450	50024	1	0	0 161	2014	0.826		23000	
0	1 0 89	2014 6.7	760	40000		0	0	0		
30 2012	5.	. 980	51439		1		0			0
232 2015	14.	.790	12900		0		0			1
290 2014	6.	. 400	19000		0		0			0
35 2011	7.	.740	49998		2		0			0
7 2015	8.	.610	33429		1		0			0
183 2013	0.	. 470	21000		0		1			0
13 2015	7.	.710	26000		0		0			0
269 2015	10.000	18828	0	0	0 65 2	2014	6.950		45000	
1	0 0 178	3 2014 0.5	520	19000		0	1	1		
258 2015	13.600	25000	0	0	0 227	2011	4.430		57000	
0	0 0 133	3 2016 0.9	950	500	0	1	0			
130 2017	0.	. 870	11000		0		1			0
156 2017	0.	. 520	15000		0		1			0
237 2015	13.	. 600	68000		1		0			0
262 2015	5.	. 800	40023		0		0			0
112 2014	2.400	7000 0	1	0 282	2014	14.00	0	63000		1
0	0 164 2016	0.540	14000		0	1	0			
275 2016	13.600	30753	0	0	1 154	2014	0.880		8000	0
1	0 29 2015	10.380	45000		1	0	0			
141 2016	0.800	20000	0	1	0 192	2007	0.750		49000	
0	1 0 216	2016 4.4	430	12500		0	0	0		
3 2011	4.	.150	5200		0		0			0
159 2017	0.	.510	4000		0		1			1

	0	Owner				
99	0	161	0			
89		0)			
30		0)			
232		0)			
290		0)			
35		0)			
7		0)			
183		0)			
13		0)			
269		0)			
65		0)			
178		0)			
258		0)			
227		0)			
133		0)			
130		0)			
156		0)			
237		0)			
262		0)			
112		0				
282		0)			
164		0)			

```
275
        0
154
         0
29
         0
         0
141
         1
192
216
         0
3
         0
159
         0
print(Y_train)
output :
204
       2.75
      5.25
249
277
      9.70
    0.20
194
244
    5.95
       . . .
75
     3.95
22
       4.40
72
       7.45
15
       7.75
168
       0.42
Name: Selling_Price, Length: 270, dtype: float64
print(Y_test)
output :
99
       9.65
161
       0.45
89
       4.75
30
        3.10
232
       11.45
290
       4.50
35
        2.95
7
        6.50
183
        0.27
13
        6.10
       6.70
269
       4.75
65
178
        0.35
        8.40
258
227
        2.55
133
        0.72
130
       0.75
        0.48
156
237
       11.25
       4.00
262
112
        1.15
282
       8.25
       0.45
164
275
       10.90
       0.50
154
```

29

7.45

```
141 0.60
192 0.20
216 2.90
3 2.85
159 0.45
```

Name: Selling_Price, dtype: float64