Car Resales Price 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_Typ
0 2014 5.59 27000 0
```

	Year	Present_Price	Kms_Driven	Fuel_Type	Seller_Type	Transmission	\
0	2014	5.59	27000	0	0	0	
1	2013	9.54	43000	1	0	0	
2	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	
298	2009	11.00	87934	0	0	0	
299	2017	12.50	9000	1	0	0	
300	2016	5.90	5464	0	0	0	

Owner

[301 rows x 7 columns]

```
print(Y)
output :
0
       3.35
1
       4.75
2
       7.25
3
       2.85
4
       4.60
       . . .
296
      9.50
297
       4.00
       3.35
298
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 = 2
)
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
                                                                         0
194 2008
                              50000
                                             0
                                                                         0
                  0.787
                                                           1
244 2013
                               49000
                                              1
                                                           0
                                                                         0
                  9.400
     . . .
. .
                   . . .
                                . . .
75
     2015
                 6.800
                               36000
                                                                        0
                                             0
                                                          0
                                                                        1
22 2011
                 8.010
                                             0
                                                          0
                              50000
72 2013
                 18.610
                                             0
                                                          0
                                                                       0
                              56001
    2016
                 10.790
                                                          0
                                                                        0
15
                              43000
                                             1
168 2013
                                             0
                                                           1
                                                                        0
                  0.730
                               12000
     Owner
204
         0
249
         0
277
         0
194
         0
         0
244
. .
       . . .
75
        0
22
         0
72
         0
15
         0
```

[270 rows x 7 columns]

Output :

	Year	Present_Price	Kms_Driven	Fuel_Type	Seller_Type	Transmission	\
99	2010	20.450	50024	1	0	0	
161	2014	0.826	23000	0	1	0	
89	2014	6.760	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	2014	6.950	45000	1	0	0	
178	2014	0.520	19000	0	1	1	
258	2015	13.600	25000	0	0	0	
227	2011	4.430	57000	0	0	0	
133	2016	0.950	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	14.000	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	4.430	12500	0	0	0	
3	2011	4.150	5200	0	0	0	
159	2017	0.510	4000	0	1	1	

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

275

10.90

0.50
7.45
0.60
0.20
2.90
2.85
0.45

Name: Selling_Price, dtype: float64