

# 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	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
0	0
1	0
2	0
3	0
4	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      4.60
...
296     9.50
297     4.00
298     3.35
299    11.50
300     5.30
Name: Selling_Price, Length: 301, dtype: float64
```

Spilting the flaining data and l'est 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	0	
249	2016	7.600	17000	0	0	0	
277	2015	13.600	21780	0	0	0	
194	2008	0.787	50000	0	1	0	
244	2013	9.400	49000	1	0	0	
..	...	...	...	...	...	...	
75	2015	6.800	36000	0	0	0	
22	2011	8.010	50000	0	0	1	
72	2013	18.610	56001	0	0	0	
15	2016	10.790	43000	1	0	0	
168	2013	0.730	12000	0	1	0	

	Owner
204	0
249	0
277	0
194	0
244	0
..	...
75	0
22	0
72	0
15	0
168	0

[270 rows x 7 columns]

```
print(X_test)
```

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
3	0
159	0

```
print(Y_train)
```

**output :**

204	2.75
249	5.25
277	9.70
194	0.20
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
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
262	4.00
112	1.15
282	8.25
164	0.45
275	10.90

154	0.50
29	7.45
141	0.60
192	0.20
216	2.90
3	2.85
159	0.45

Name: Selling\_Price, dtype: float64