In [1]:
```
import pandas as pd
data = pd.DataFrame({
    'OriginalFeature':[1,2,3,4,5,6,7,8],
    'CategoricalFeature': ["A","B","A","C","B","A","C","A"]
})
data
```

Out[1]:

	OriginalFeature	CategoricalFeature
0	1	A
1	2	B
2	3	A
3	4	C
4	5	B
5	6	A
6	7	C
7	8	A

In [2]:
```
# converting categorical data into numeric data by encoding it using one-Hot Encoding.

data1 = pd.get_dummies(data,columns=['CategoricalFeature'])
data1
```

Out[2]:

	OriginalFeature	CategoricalFeature_A	CategoricalFeature_B	CategoricalFeature_C
0	1	1	0	0
1	2	0	1	0
2	3	1	0	0
3	4	0	0	1
4	5	0	1	0
5	6	1	0	0
6	7	0	0	1
7	8	1	0	0

In [3]:
```
data2 = pd.get_dummies(data,columns=['CategoricalFeature'],drop_first=True)
data2
```

Out[3]:

	OriginalFeature	CategoricalFeature_B	CategoricalFeature_C
0	1	0	0
1	2	1	0
2	3	0	0
3	4	0	1
4	5	1	0
5	6	0	0
6	7	0	1
7	8	0	0

In [9]:
```
import pandas as pd

ds = pd.read_csv('car data.csv')
ds
```

Out[9]:

	Car_Name	Year	Selling_Price	Present_Price	Kms_Driven	Fuel_Type	Seller_Type	Transmission	Owner
0	ritz	2014	3.35	5.59	27000	Petrol	Dealer	Manual	0
1	sx4	2013	4.75	9.54	43000	Diesel	Dealer	Manual	0
2	ciaz	2017	7.25	9.85	6900	Petrol	Dealer	Manual	0
3	wagon r	2011	2.85	4.15	5200	Petrol	Dealer	Manual	0
4	swift	2014	4.60	6.87	42450	Diesel	Dealer	Manual	0
...	...	...	...	...	...	...	...	...	...
296	city	2016	9.50	11.60	33988	Diesel	Dealer	Manual	0
297	brio	2015	4.00	5.90	60000	Petrol	Dealer	Manual	0
298	city	2009	3.35	11.00	87934	Petrol	Dealer	Manual	0
299	city	2017	11.50	12.50	9000	Diesel	Dealer	Manual	0

	Car_Name	Year	Selling_Price	Present_Price	Kms_Driven	Fuel_Type	Seller_Type	Transmission	Owner
300	brio	2016	5.30	5.90	5464	Petrol	Dealer	Manual	0

301 rows × 9 columns

In [10]:
```
ds.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 301 entries, 0 to 300
Data columns (total 9 columns):
 #   Column         Non-Null Count  Dtype  
---  ------         --------------  -----  
 0   Car_Name       301 non-null    object 
 1   Year           301 non-null    int64  
 2   Selling_Price  301 non-null    float64
 3   Present_Price  301 non-null    float64
 4   Kms_Driven     301 non-null    int64  
 5   Fuel_Type      301 non-null    object 
 6   Seller_Type    301 non-null    object 
 7   Transmission   301 non-null    object 
 8   Owner          301 non-null    int64  
dtypes: float64(2), int64(3), object(4)
memory usage: 21.3+ KB
```

In [11]:
```
ds.drop("Car_Name",axis=1,inplace=True)
ds
```

Out[11]:

	Year	Selling_Price	Present_Price	Kms_Driven	Fuel_Type	Seller_Type	Transmission	Owner
0	2014	3.35	5.59	27000	Petrol	Dealer	Manual	0
1	2013	4.75	9.54	43000	Diesel	Dealer	Manual	0
2	2017	7.25	9.85	6900	Petrol	Dealer	Manual	0
3	2011	2.85	4.15	5200	Petrol	Dealer	Manual	0
4	2014	4.60	6.87	42450	Diesel	Dealer	Manual	0
...	...	...	...	...	...	...	...	...
296	2016	9.50	11.60	33988	Diesel	Dealer	Manual	0
297	2015	4.00	5.90	60000	Petrol	Dealer	Manual	0
298	2009	3.35	11.00	87934	Petrol	Dealer	Manual	0

	Year	Selling_Price	Present_Price	Kms_Driven	Fuel_Type	Seller_Type	Transmission	Owner
299	2017	11.50	12.50	9000	Diesel	Dealer	Manual	0
300	2016	5.30	5.90	5464	Petrol	Dealer	Manual	0

301 rows × 8 columns

In [13]:
```
ds = pd.get_dummies(ds)
ds
```

Out[13]:

	Year	Selling_Price	Present_Price	Kms_Driven	Owner	Fuel_Type_CNG	Fuel_Type_Diesel	Fuel_Type_Petrol	Seller_Type_Dealer	Seller_Type_I
0	2014	3.35	5.59	27000	0	0	0	1	1	
1	2013	4.75	9.54	43000	0	0	1	0	1	
2	2017	7.25	9.85	6900	0	0	0	1	1	
3	2011	2.85	4.15	5200	0	0	0	1	1	
4	2014	4.60	6.87	42450	0	0	1	0	1	
...	...	...	...	...	...	...	...	...	...	...
296	2016	9.50	11.60	33988	0	0	1	0	1	
297	2015	4.00	5.90	60000	0	0	0	1	1	
298	2009	3.35	11.00	87934	0	0	0	1	1	
299	2017	11.50	12.50	9000	0	0	1	0	1	
300	2016	5.30	5.90	5464	0	0	0	1	1	

301 rows × 12 columns

In [15]:
```
ds = pd.get_dummies(ds,drop_first=True)
ds
```

Out[15]:

	Year	Selling_Price	Present_Price	Kms_Driven	Owner	Fuel_Type_CNG	Fuel_Type_Diesel	Fuel_Type_Petrol	Seller_Type_Dealer	Seller_Type_I
0	2014	3.35	5.59	27000	0	0	0	1	1	
1	2013	4.75	9.54	43000	0	0	1	0	1	

	Year	Selling_Price	Present_Price	Kms_Driven	Owner	Fuel_Type_CNG	Fuel_Type_Diesel	Fuel_Type_Petrol	Seller_Type_Dealer	Seller_Type_I
2	2017	7.25	9.85	6900	0	0	0	1	1	
3	2011	2.85	4.15	5200	0	0	0	1	1	
4	2014	4.60	6.87	42450	0	0	1	0	1	
...	...	...	...	...	...	...	...	...	...	...
296	2016	9.50	11.60	33988	0	0	1	0	1	
297	2015	4.00	5.90	60000	0	0	0	1	1	
298	2009	3.35	11.00	87934	0	0	0	1	1	
299	2017	11.50	12.50	9000	0	0	1	0	1	
300	2016	5.30	5.90	5464	0	0	0	1	1	

301 rows × 12 columns