

```
In [2]: # import the data from file

import pandas as pd
df = pd.read_csv(r"C:\Users\309962\Desktop\carprices.csv")
df.head()
```

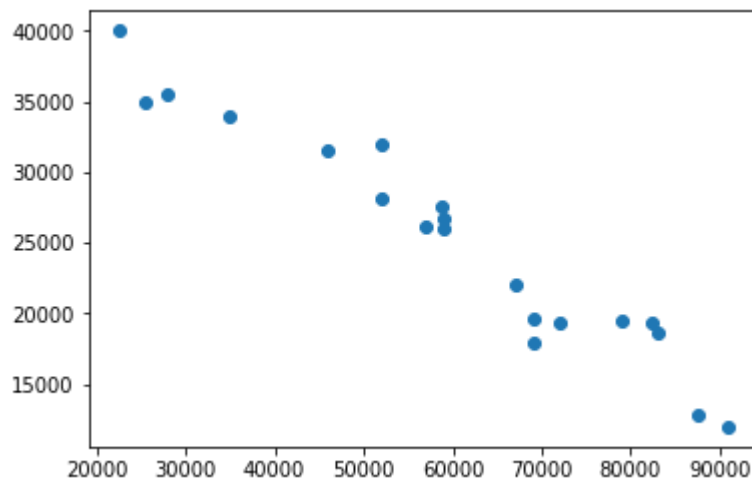
Out[2]:

	Mileage	Age(yrs)	Sell Price(\$)
0	69000	6	18000
1	35000	3	34000
2	57000	5	26100
3	22500	2	40000
4	46000	4	31500

```
In [3]: # import matplotlib to plot the data between Mileage vs SellPrice
import matplotlib.pyplot as plt
%matplotlib inline

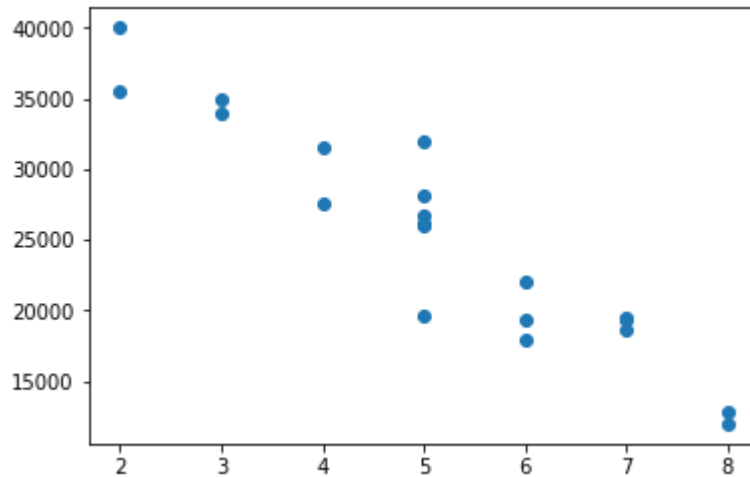
plt.scatter(df['Mileage'],df['Sell Price($)'])
```

```
Out[3]: <matplotlib.collections.PathCollection at 0x19bc86616d8>
```



```
In [4]: # Plot the data between Age vs Sell Price
plt.scatter(df['Age(yrs)'],df['Sell Price($)'])
```

Out[4]: <matplotlib.collections.PathCollection at 0x19bc8bc55c0>



```
In [5]: # Split the Data with Independent variables as age and Mileage and dependent var
X = df[['Mileage','Age(yrs)']]
y = df['Sell Price($)']
```

```
In [6]: # import sklearn to split the data between test and train
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X,y,test_size=0.3)
```

In [7]: X_train

Out[7]:

	Mileage	Age(yrs)
10	83000	7
0	69000	6
9	67000	6
1	35000	3
6	52000	5
11	79000	7
14	82450	7
17	69000	5
19	52000	5
15	25400	3
18	87600	8
13	58780	4
16	28000	2
5	59000	5

In [8]: X_test

Out[8]:

	Mileage	Age(yrs)
7	72000	6
4	46000	4
8	91000	8
2	57000	5
12	59000	5
3	22500	2

```
In [9]: y_train
```

```
Out[9]: 10    18700
        0     18000
        9     22000
        1     34000
        6     32000
       11     19500
       14     19400
       17     19700
       19     28200
       15     35000
       18     12800
       13     27500
       16     35500
        5     26750
      Name: Sell Price($), dtype: int64
```

```
In [10]: y_test
```

```
Out[10]: 7      19300
        4      31500
        8      12000
        2      26100
       12      26000
        3      40000
      Name: Sell Price($), dtype: int64
```

```
In [11]: # now create a linear model

from sklearn.linear_model import LinearRegression
clf = LinearRegression()
clf.fit(X_train, y_train)
```

```
Out[11]: LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False)
```

```
In [12]: X_test
```

```
Out[12]:
```

	Mileage	Age(yrs)
7	72000	6
4	46000	4
8	91000	8
2	57000	5
12	59000	5
3	22500	2

In [13]: *# Predict the sell price now*

```
clf.predict(X_test)
```

Out[13]: array([21027.17380314, 29927.68743754, 14378.61246857, 26120.84556315,
25477.43062034, 38023.93239343])

In [14]:

```
y_test
```

Out[14]:

7	19300
4	31500
8	12000
2	26100
12	26000
3	40000

Name: Sell Price(\$), dtype: int64

In [15]: *# Do a comparison with Score(Actual Vs predicted output)*

```
clf.score(X_test, y_test)
```

Out[15]: 0.9672523728982899

In [16]: X_train, X_test, y_train, y_test = train_test_split(X,y,test_size=0.3,random_stat
X_test

Out[16]:

	Mileage	Age(yrs)
7	72000	6
10	83000	7
5	59000	5
6	52000	5
3	22500	2
18	87600	8

In []: