

```
In [1]: import pandas as pd
df = pd.read_csv("C:/Users/aziz/Desktop/Downloads/6_train_test_split/carprices.csv")
df.head()
```

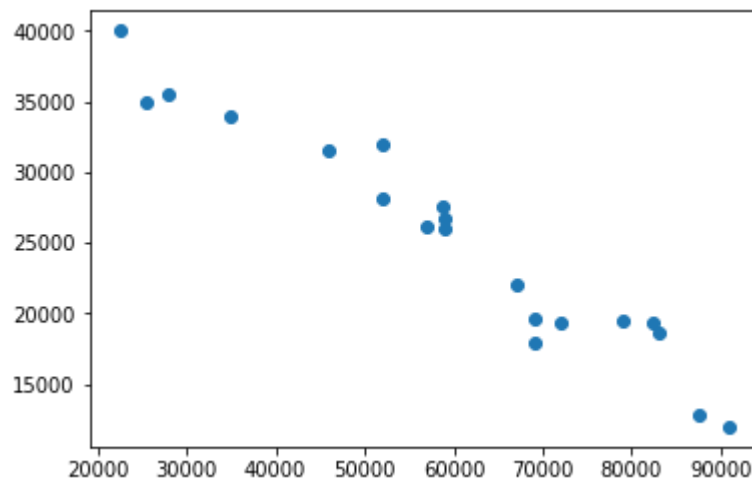
Out[1]:

	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.pyplot as plt
%matplotlib inline
```

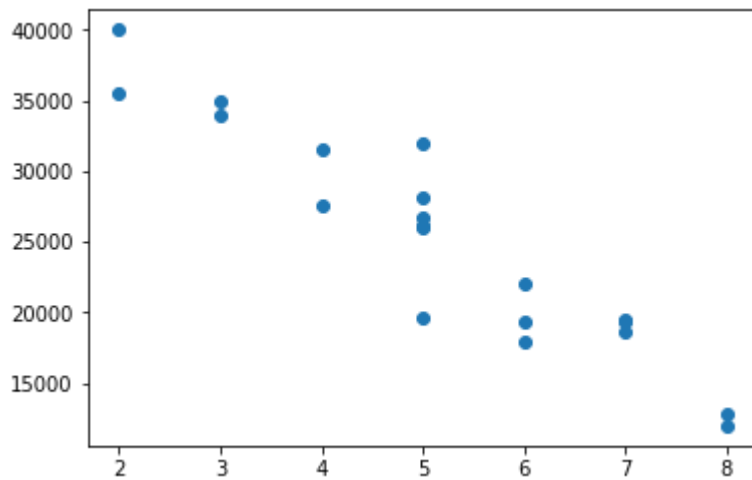
```
In [4]: plt.scatter(df['Mileage'],df['Sell Price($)'])
```

Out[4]: <matplotlib.collections.PathCollection at 0x1fad60f2eb8>



```
In [5]: plt.scatter(df['Age(yrs)'],df['Sell Price($)'])
```

```
Out[5]: <matplotlib.collections.PathCollection at 0x1fad6193e10>
```



```
In [6]: X = df[['Mileage','Age(yrs)']]
```

```
In [7]: y = df['Sell Price($)']
```

```
In [8]: 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 [9]: X_train
```

```
Out[9]:
```

	Mileage	Age(yrs)
10	83000	7
0	69000	6
17	69000	5
19	52000	5
12	59000	5
16	28000	2
11	79000	7
18	87600	8
3	22500	2
14	82450	7
15	25400	3
5	59000	5
6	52000	5
7	72000	6

In [11]: X_test

Out[11]:

	Mileage	Age(yrs)
4	46000	4
8	91000	8
1	35000	3
13	58780	4
9	67000	6
2	57000	5

In [12]: y_train

Out[12]:

10	18700
0	18000
17	19700
19	28200
12	26000
16	35500
11	19500
18	12800
3	40000
14	19400
15	35000
5	26750
6	32000
7	19300

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

In [13]: y_test

Out[13]:

4	31500
8	12000
1	34000
13	27500
9	22000
2	26100

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

In [14]:

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

Out[14]: LinearRegression(copy_X=True, fit_intercept=True, n_jobs=None, normalize=False)

```
In [15]: X_test
```

```
Out[15]:
```

	Mileage	Age(yrs)
4	46000	4
8	91000	8
1	35000	3
13	58780	4
9	67000	6
2	57000	5

```
In [16]: clf.predict(X_test)
```

```
Out[16]: array([30019.27563313, 14131.29279112, 33890.42390824, 24863.95473603,  
                22680.36882446, 26148.12735802])
```

```
In [17]: y_test
```

```
Out[17]: 4      31500  
         8      12000  
         1      34000  
        13      27500  
         9      22000  
         2      26100  
         Name: Sell Price($), dtype: int64
```

```
In [18]: clf.score(X_test, y_test)
```

```
Out[18]: 0.9538895184252855
```

```
In [20]: X_train, X_test, y_train, y_test = train_test_split(X,y,test_size=0.3,random_state=42)  
         X_test
```

```
Out[20]:
```

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

```
In [ ]:
```

