

In [ ]:

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import sklearn
from sklearn import datasets
from sklearn import linear_model
from sklearn.model_selection import train_test_split
from sklearn.metrics import mean_squared_error, r2_score
```

In [ ]:

```
x,y=datasets.load_iris(return_X_y=True)
x=x[:,0:2]
```

In [8]:

```
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.20,random_state=0)
```

In [4]:

```
classifier=linear_model.LinearRegression()
```

In [5]:

```
classifier.fit(x_train,y_train)
```

Out[5]:

LinearRegression()

In [9]:

```
y_pred=classifier.predict(x_test)
y_pred
```

Out[9]:

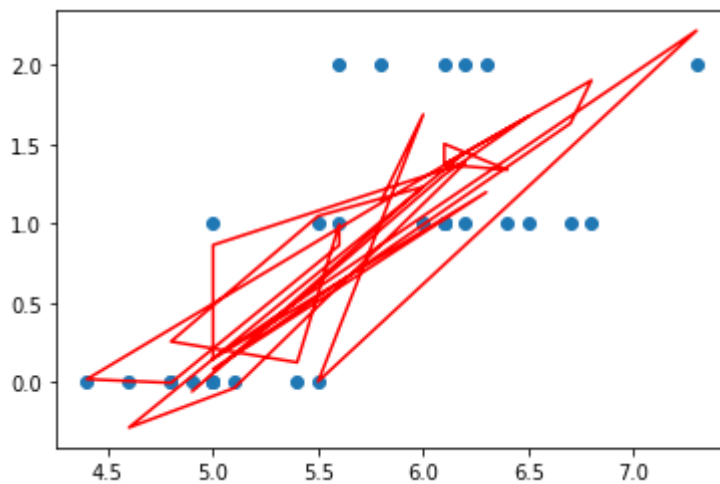
```
array([ 1.1455      ,  1.68783423,  0.00625739,  2.21618712,  0.14883162,
        1.19837053,  0.08368336,  1.63155647,  1.90272358,  1.37266708,
        1.50296358,  1.33924114,  1.37266708,  1.67555651,  1.30751882,
       -0.05718725,  1.23179646,  1.04862943,  0.25797991,  0.12597979,
        0.99405528,  0.86375878, -0.0026131 ,  0.02023873,  1.44838943,
       -0.28435432, -0.03603903,  1.38324118,  0.8654624 ,  0.14883162])
```

In [12]:

```
plt.scatter(x_test[:,0],y_test)  
plt.plot(x_test[:,0],y_pred,color='red')
```

Out[12]:

```
[<matplotlib.lines.Line2D at 0x287c5fa60b0>]
```



In [13]:

```
mean_squared_error(y_test,y_pred)
```

Out[13]:

```
0.20242275145930502
```

In [14]:

```
r2_score(y_test,y_pred)
```

Out[14]:

```
0.6243701519311865
```

In [ ]:

