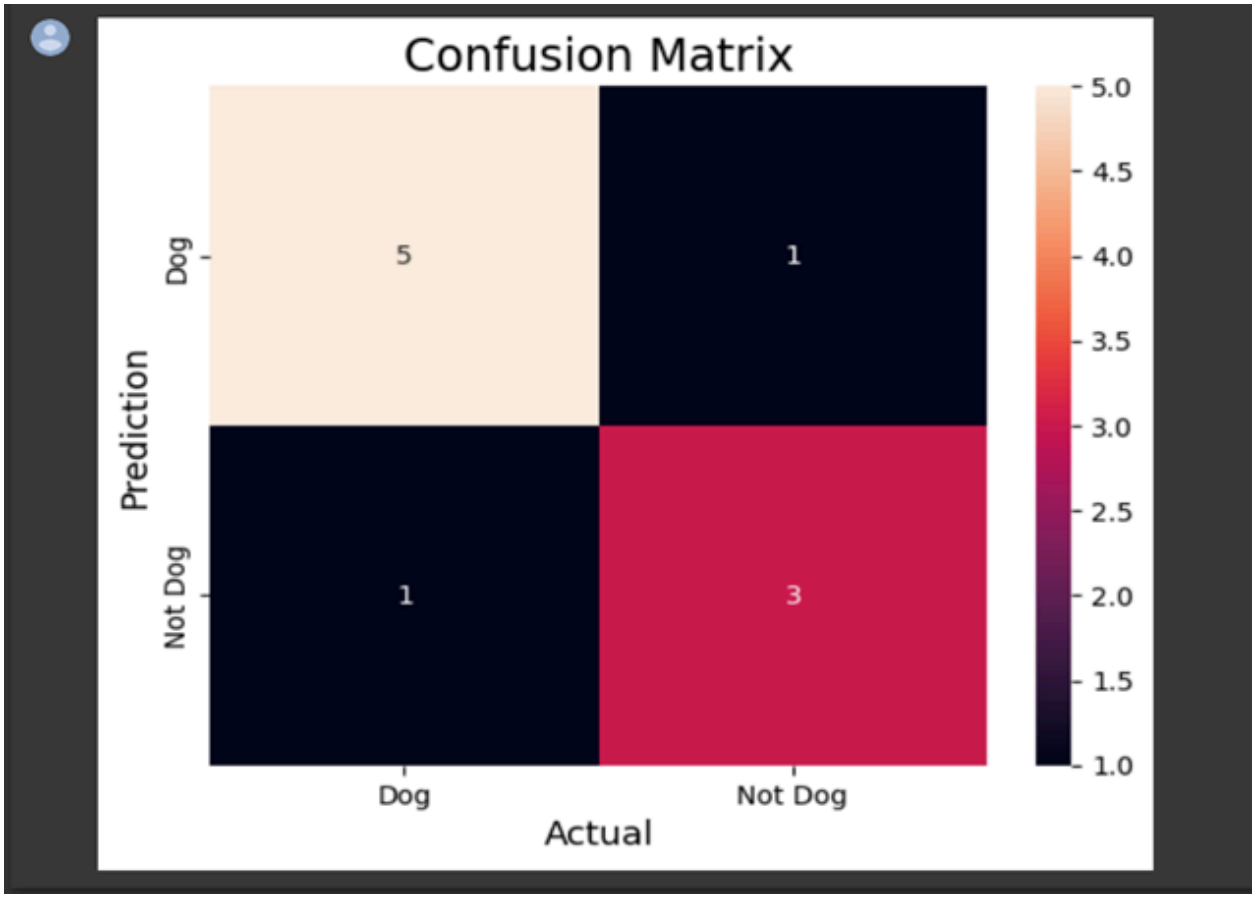
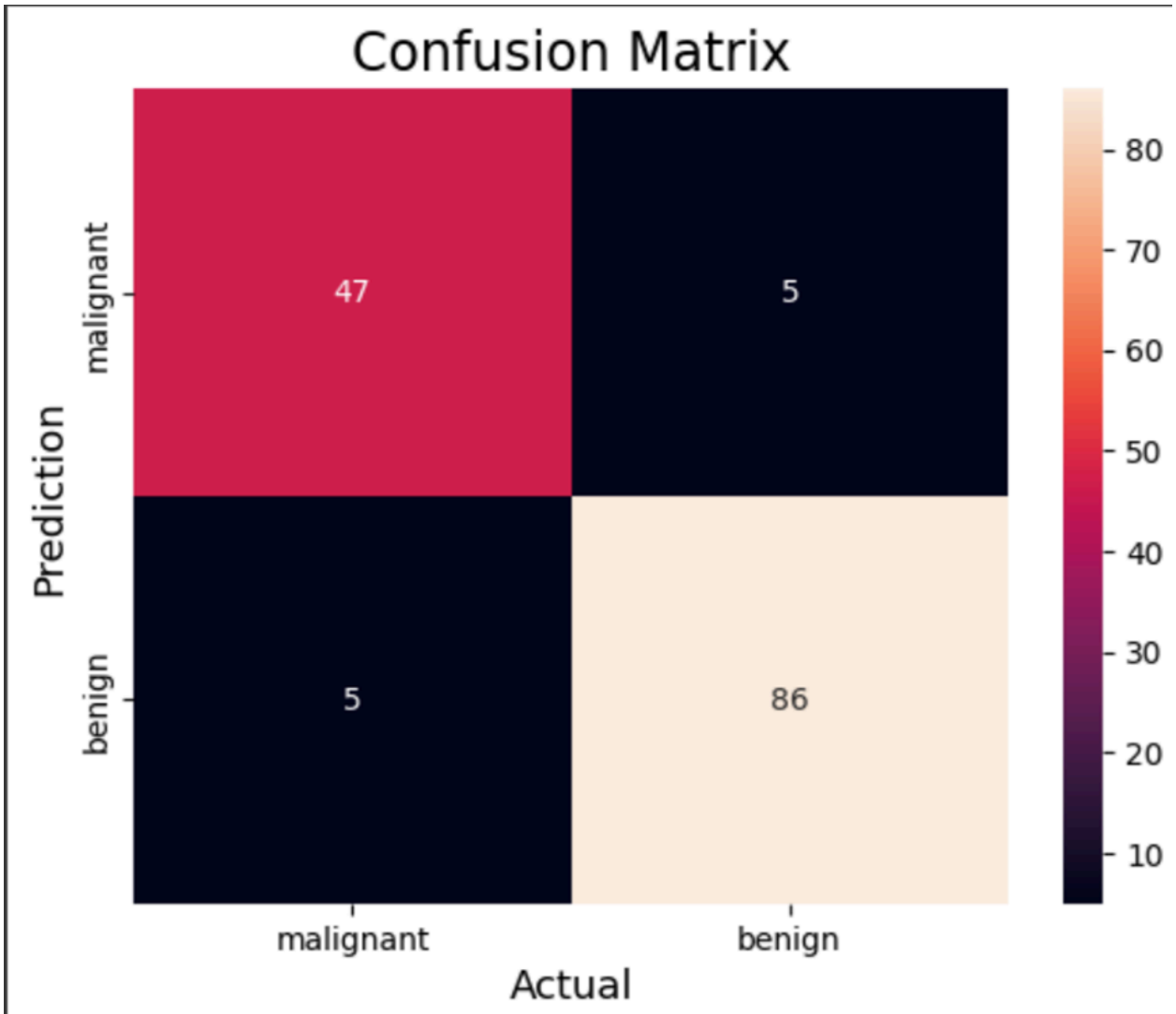
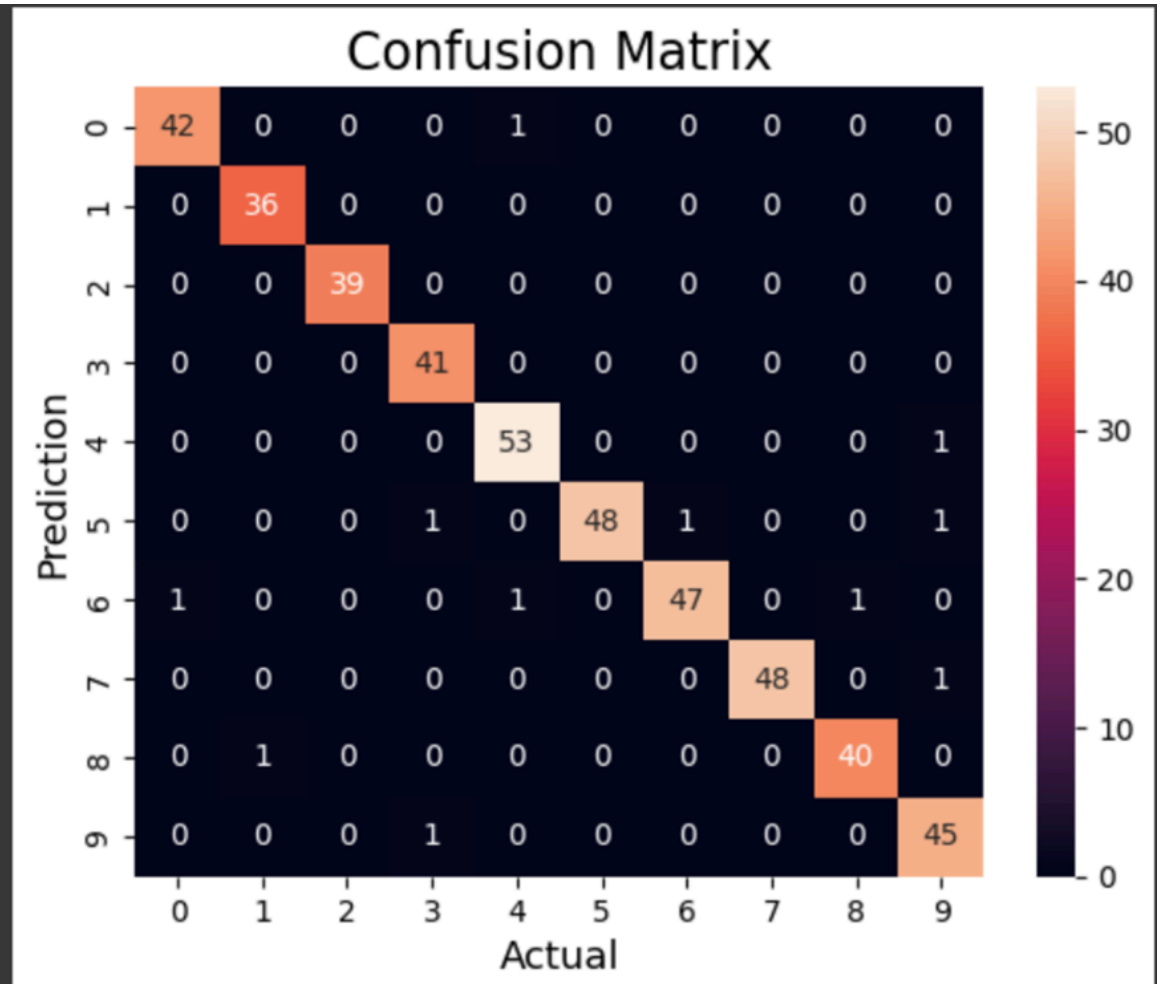
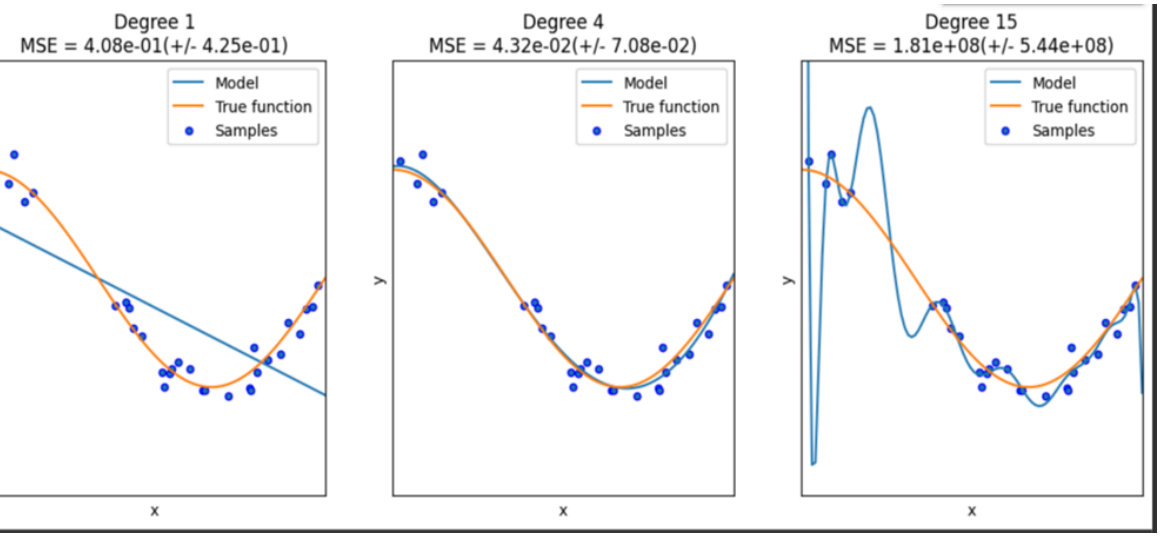

Confusion Matrix
5
1
1
3
Dog
Not Dog
Prediction
Dog
Not Dog
Actual
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0



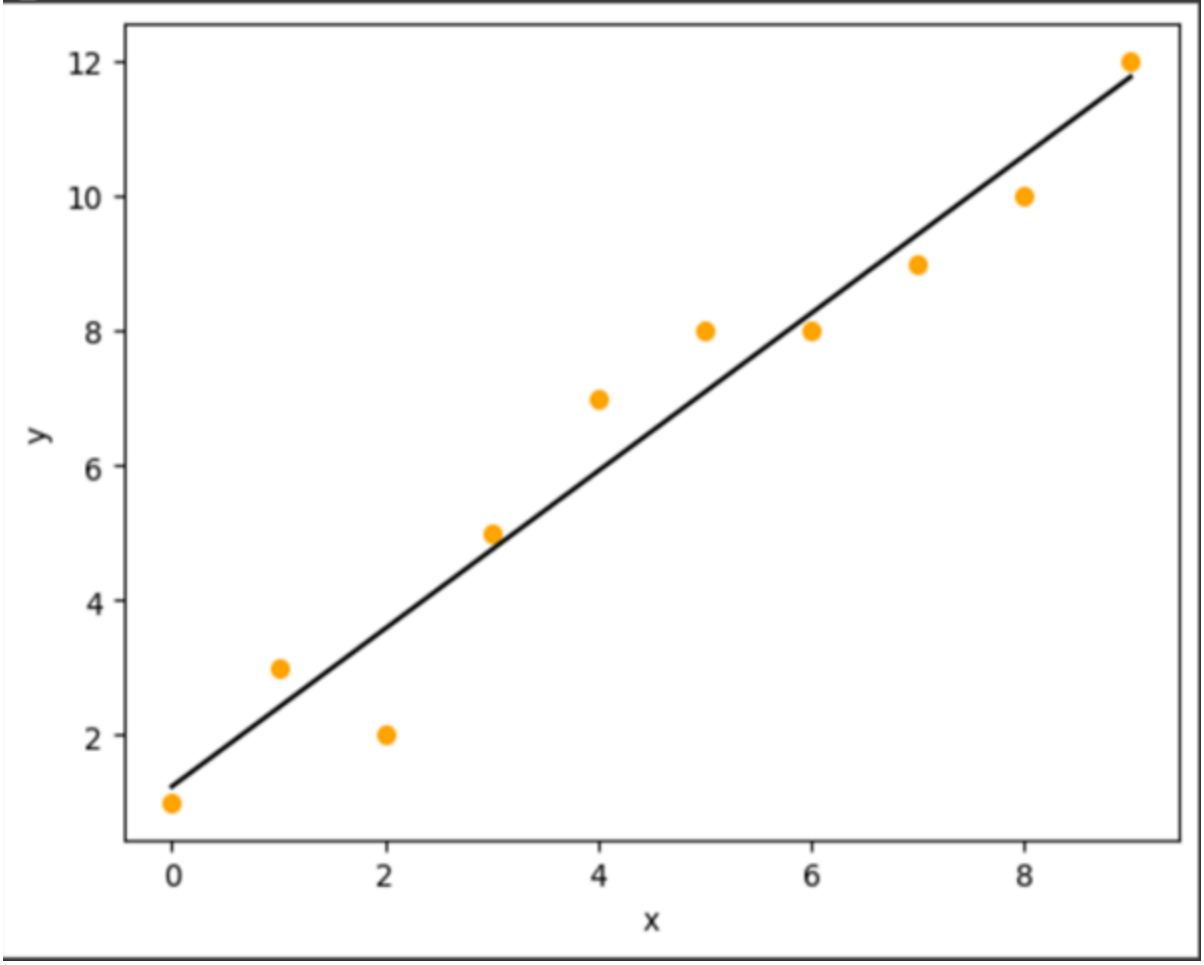

```
Accuracy   : 0.9300699300699301
Precision : 0.945054945054945
Recall    : 0.945054945054945
F1-score  : 0.945054945054945
```

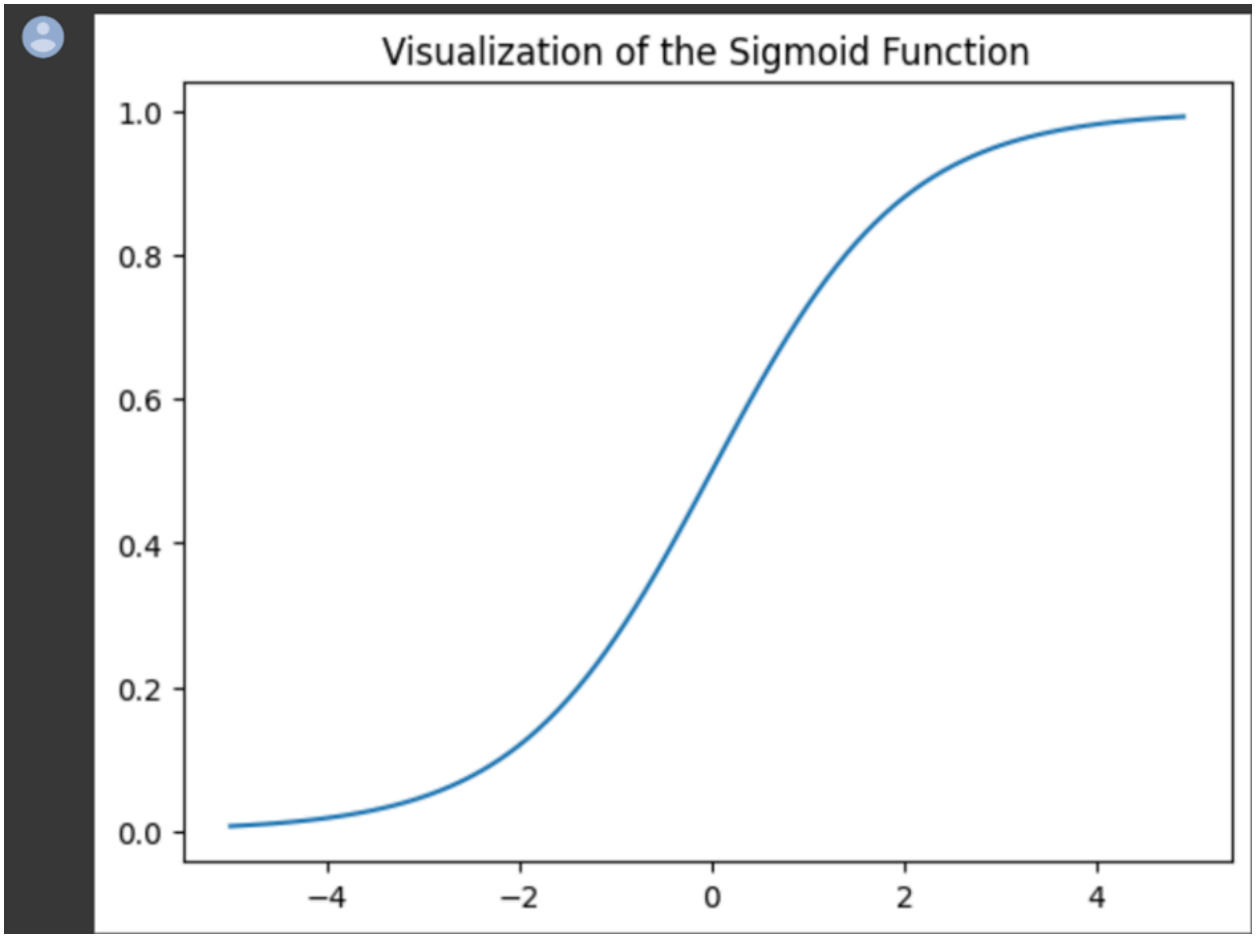



```
Accuracy    : 0.9755555555555555
```



```
Estimated coefficients:
b_0 = 1.2363636363636363
b_1 = 1.1696969696969697
```

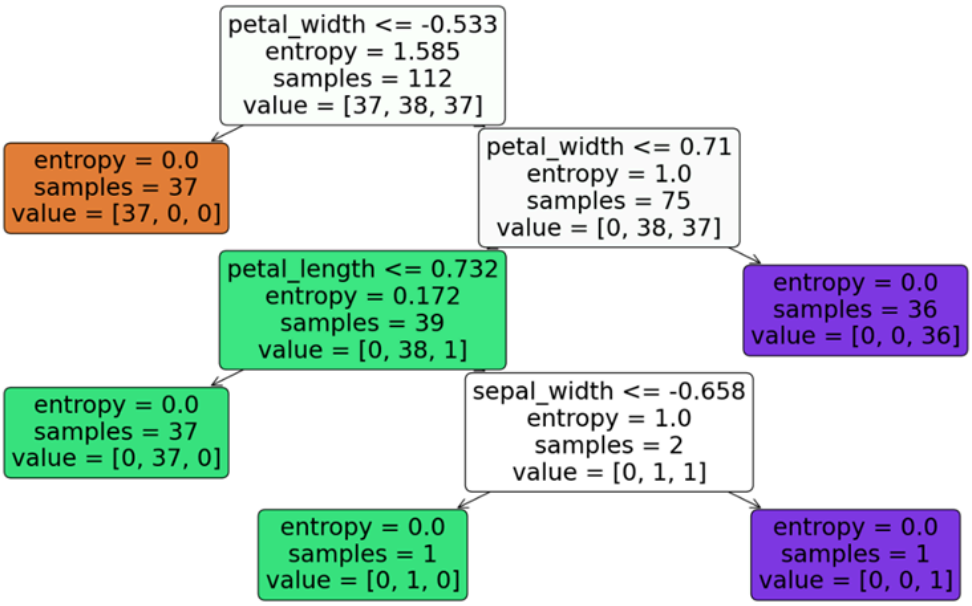





```
[[85  0]
 [ 2 50]]
0.9854014598540146
```

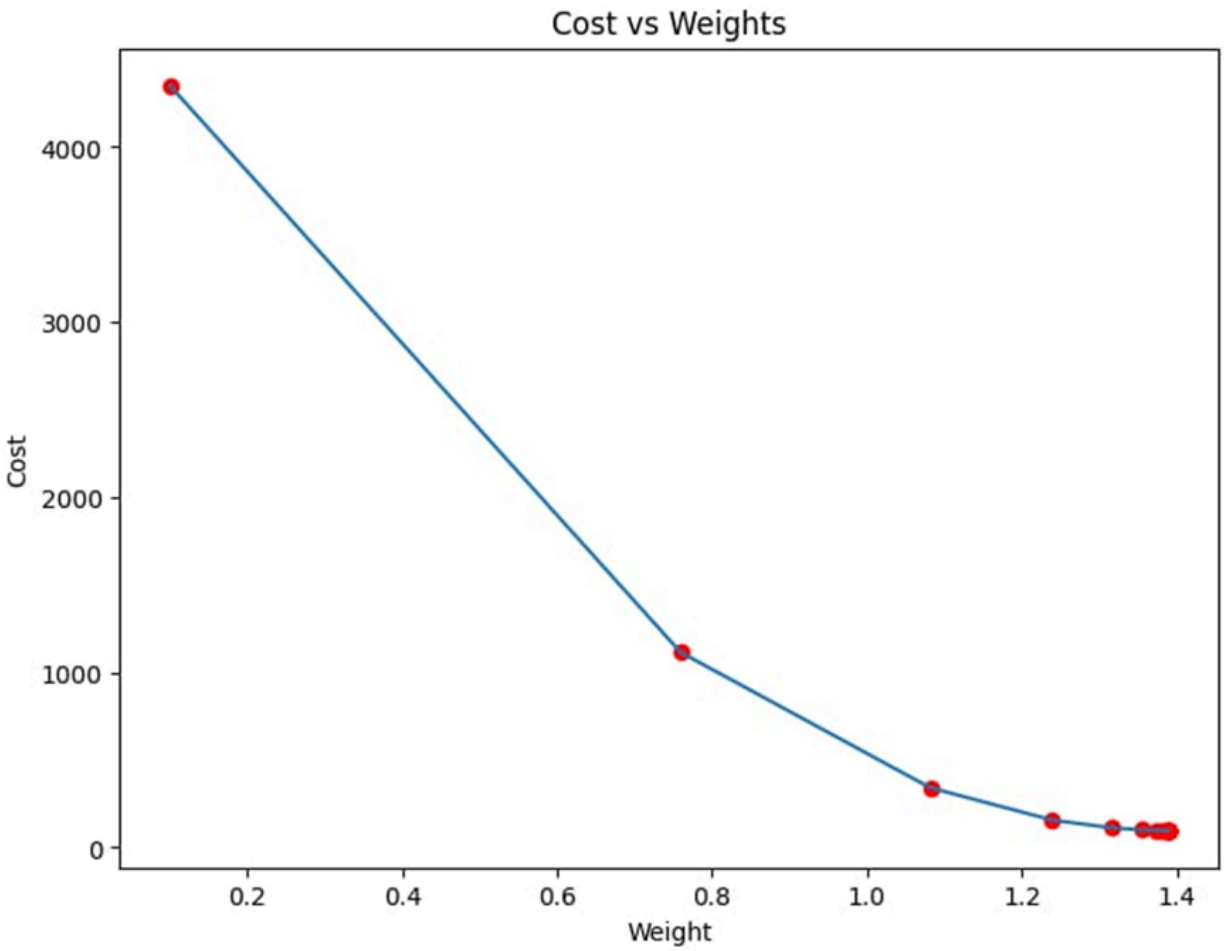
```
[[114   2]
 [  2  53]]
0.9766081871345029
```

```
[[117   8]
 [  6  74]]
0.9317073170731708
```



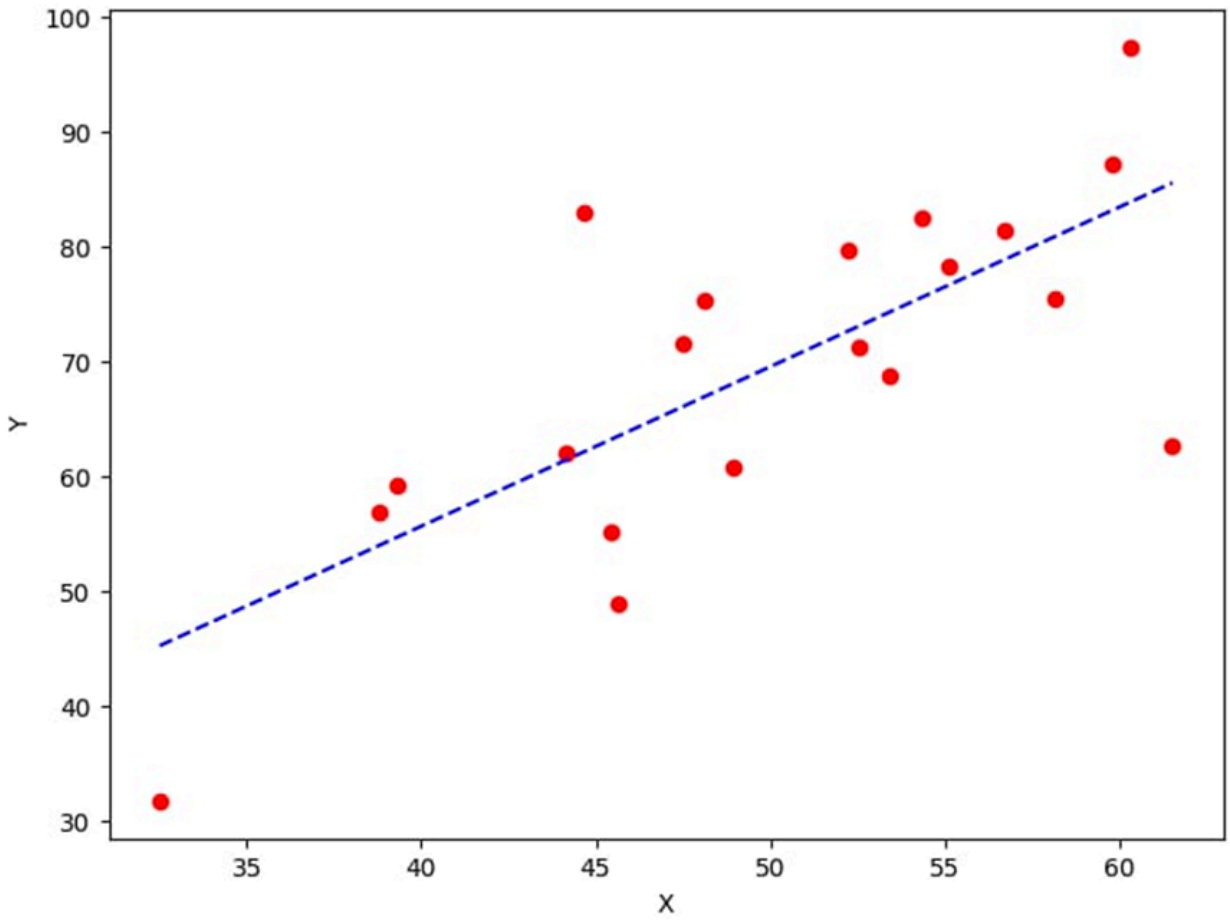

```
[[108   1]
 [  5  57]]
Accuracy: 96.49%
```

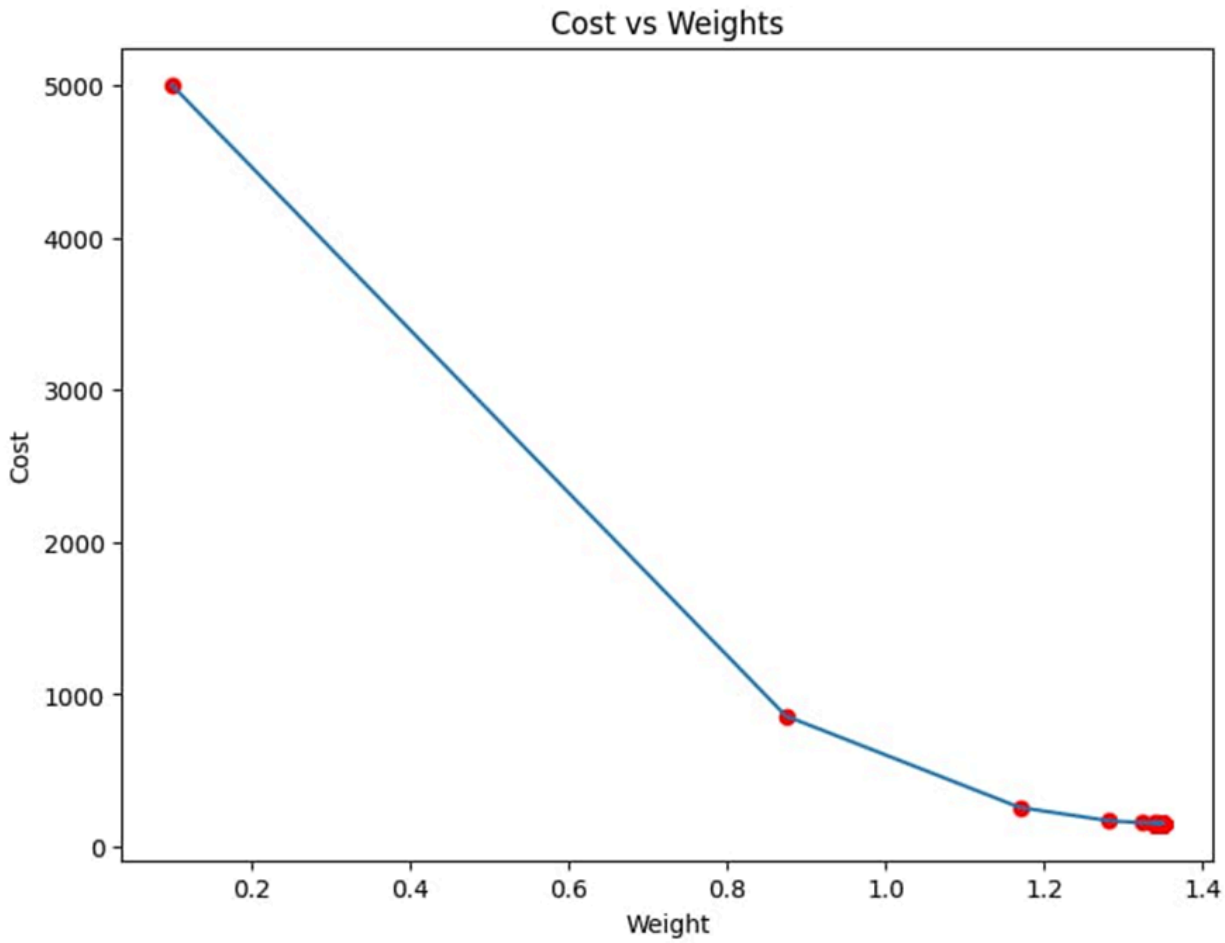
```
[[111   1]
 [  2  57]]
Accuracy: 0.9824561403508771
```




```
Estimated Weight: 1.393097090459544
Estimated Bias: 0.035349609417819915
```

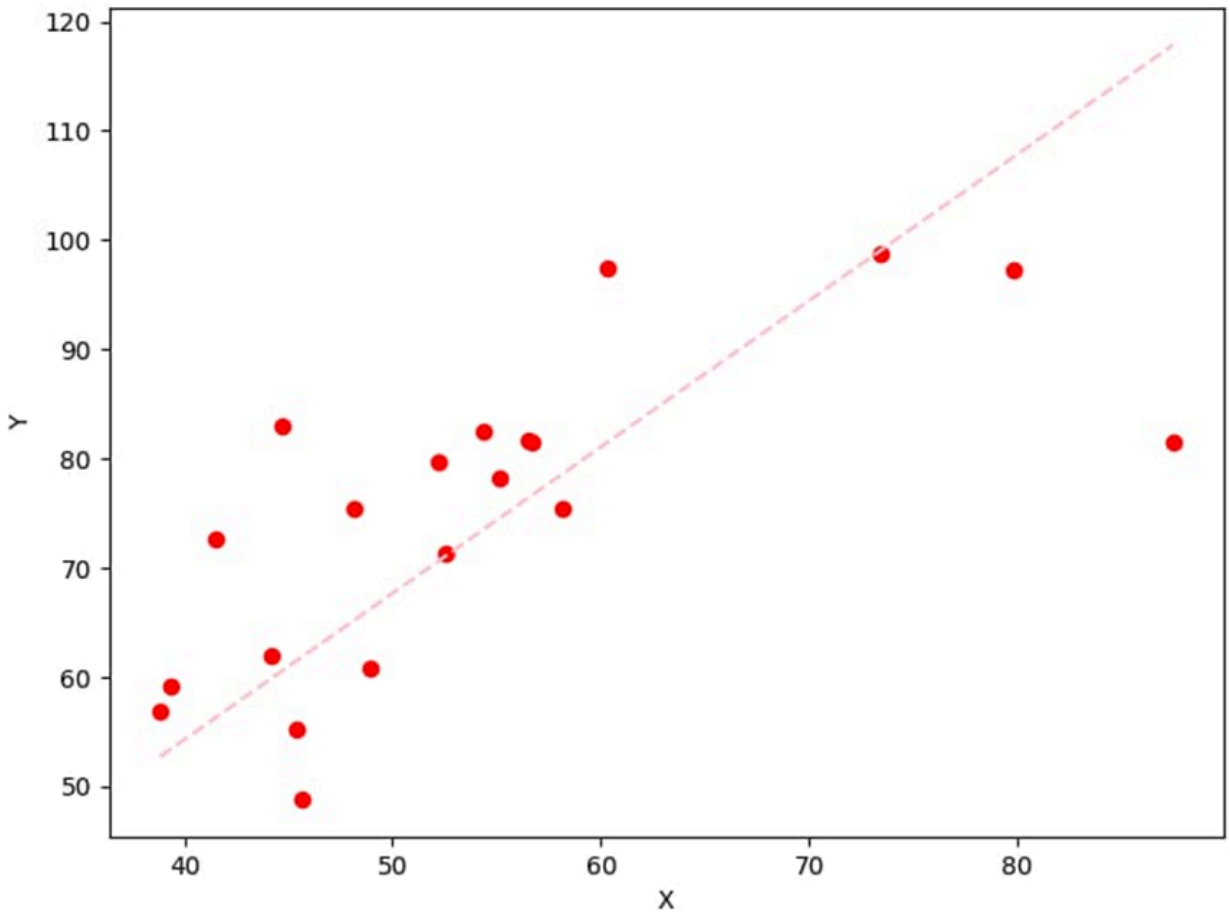
100


100
90
80
70
60
50
40
30
Y
35
40
45
50
55
60
X

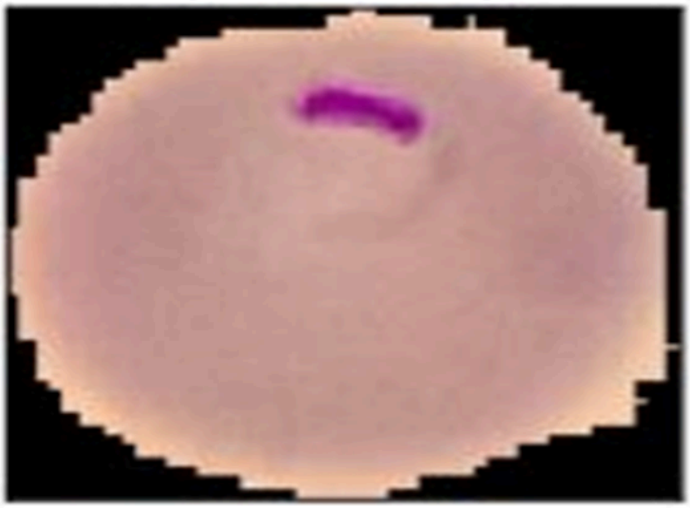



```
Estimated Weight: 1.393097090459544
Estimated Bias: 0.035349609417819915
```

100


120
110
100
90
80
70
60
50
Y
40
50
60
70
80
X

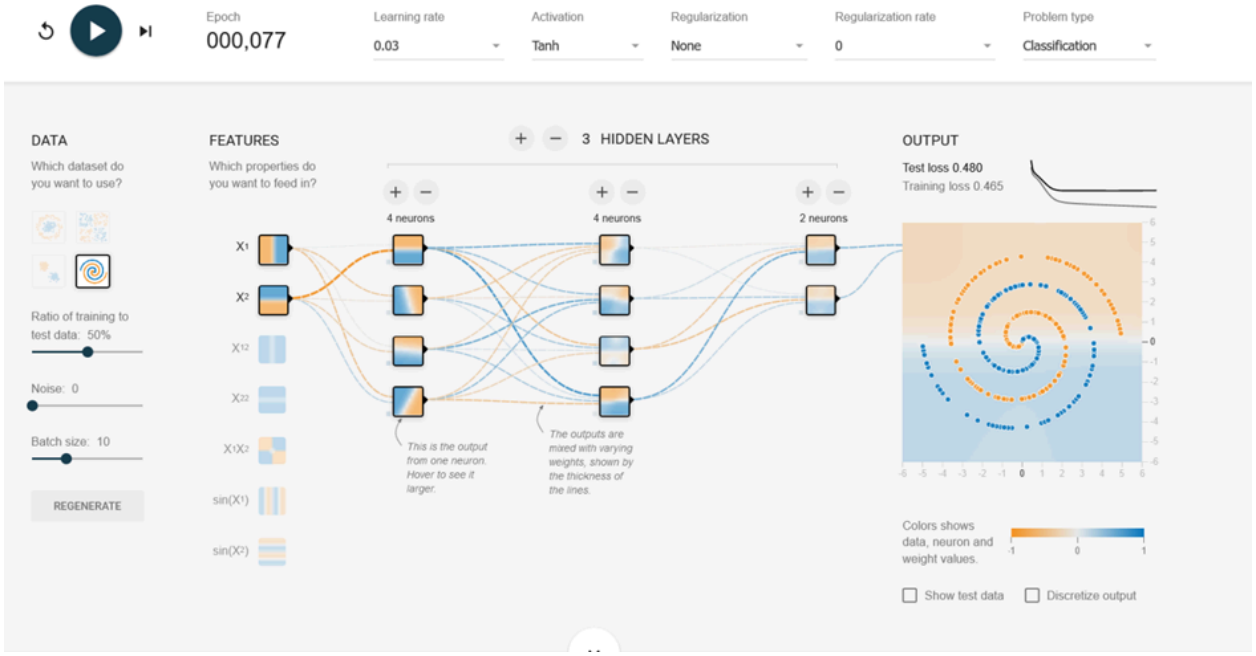
Input Image

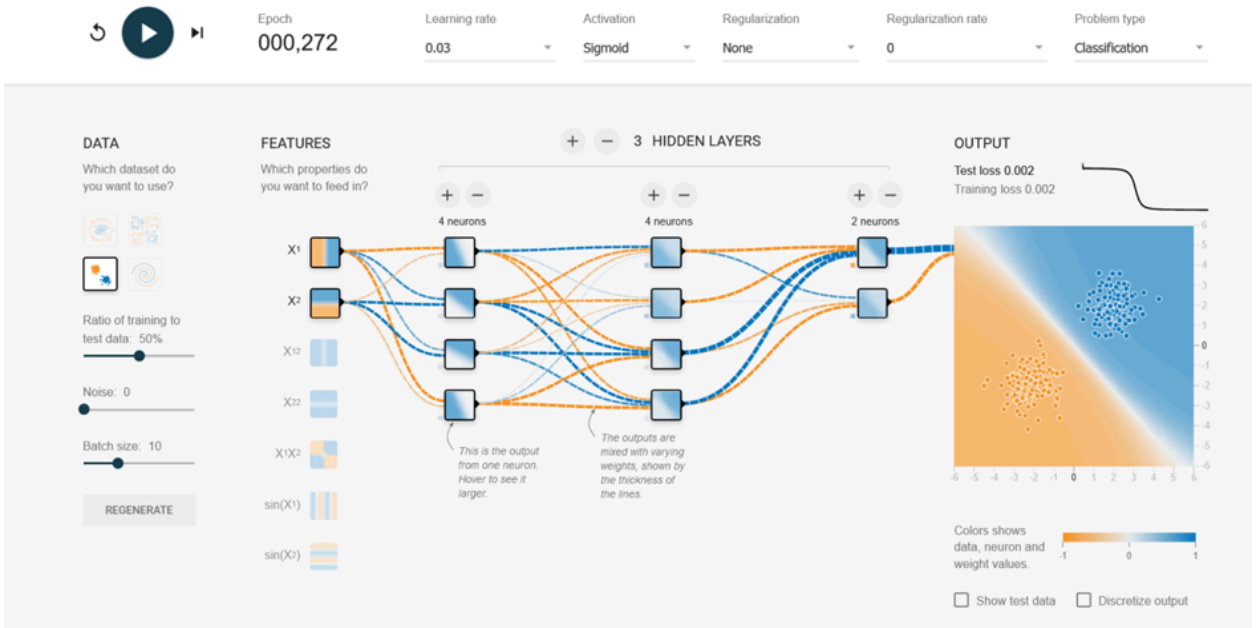


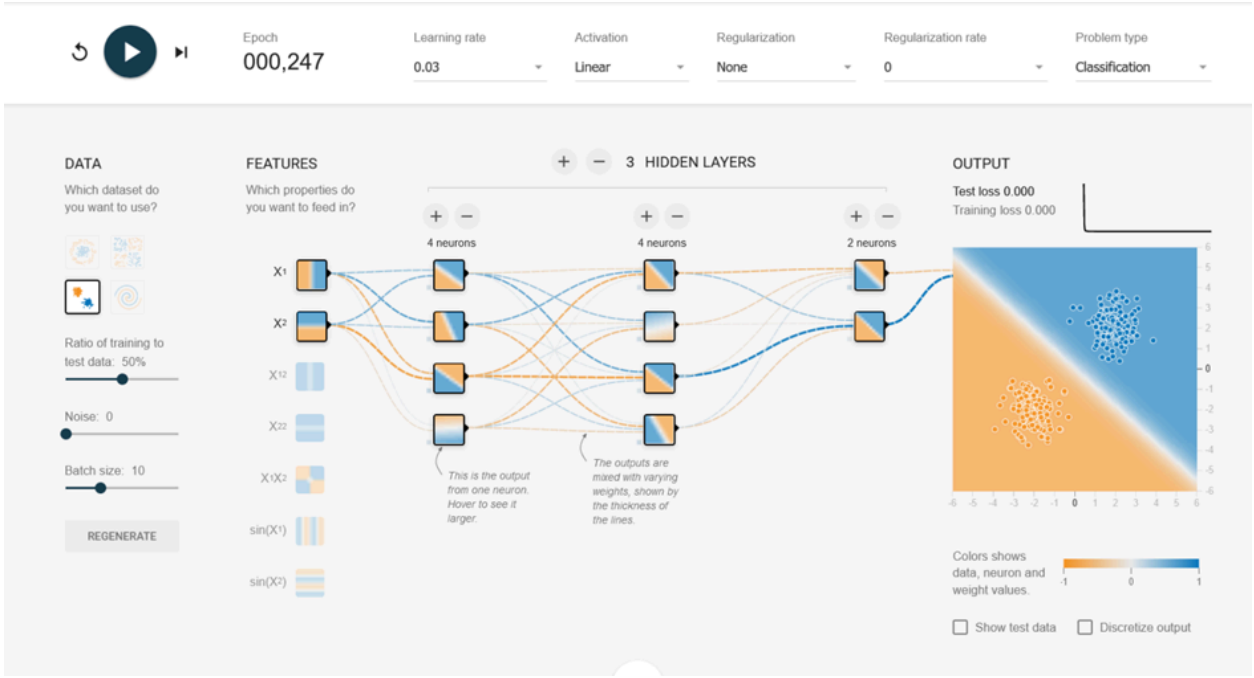
Otsu's binary threshold

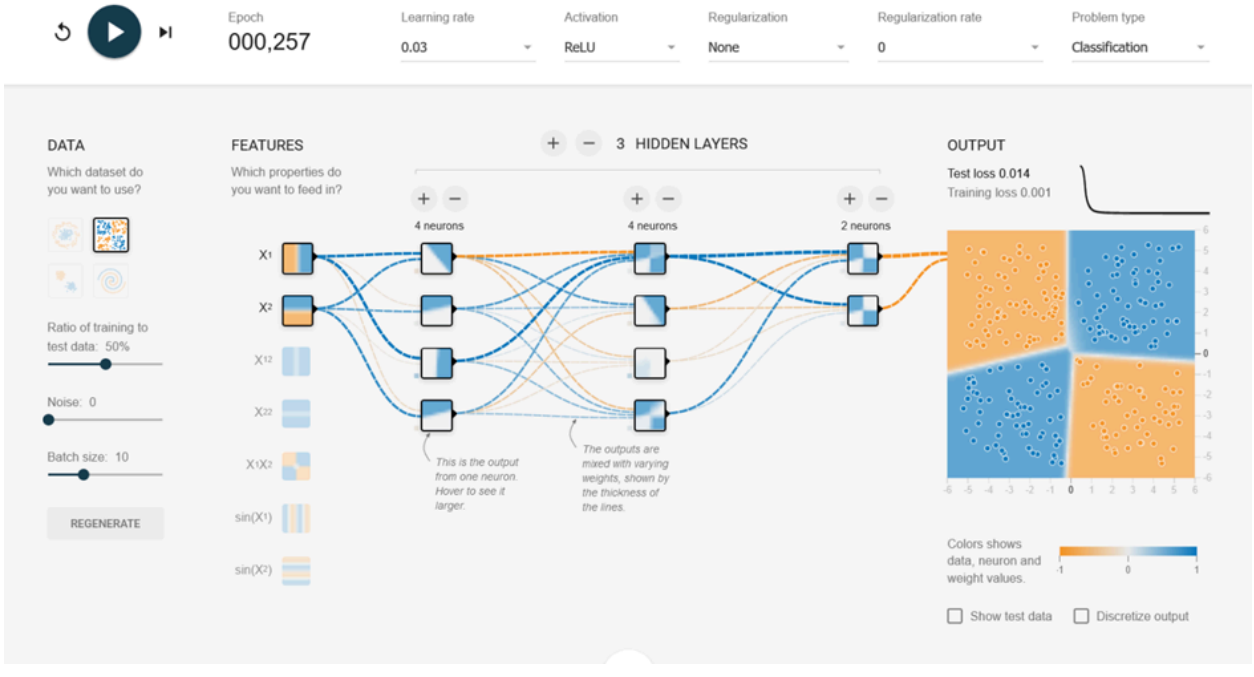
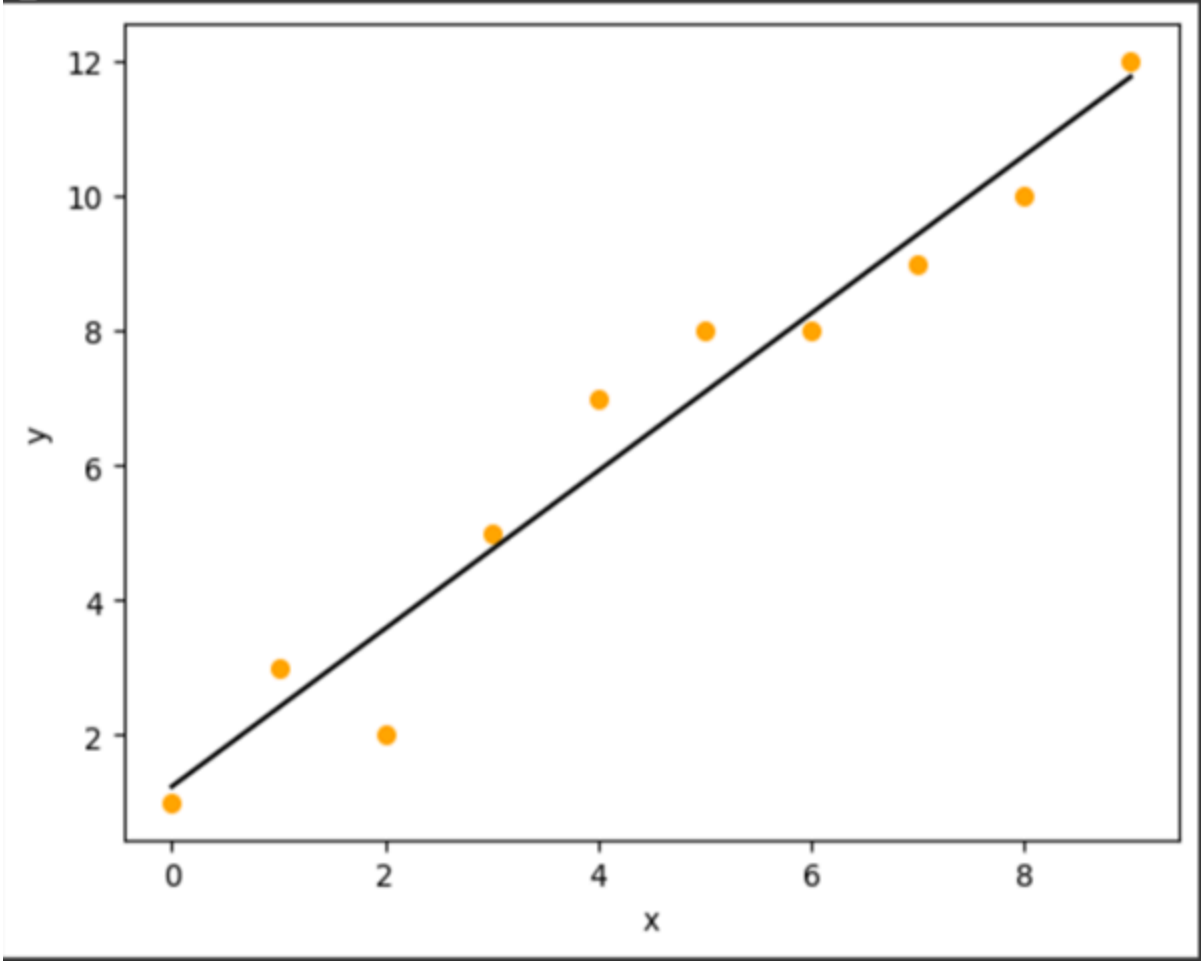
morphologyEx:Closing:2x2

Dilation


Epoch
000,077
Learning rate
0.03
Activation
Tanh
Regularization
None
Regularization rate
0
Problem type
Classification
DATA
Which dataset do you want to use?
Ratio of training to test data: 50%
Noise: 0
Batch size: 10
REGENERATE
FEATURES
Which properties do you want to feed in?
X1
X2
X12
X22
X1X2
sin(X1)
sin(X2)
3 HIDDEN LAYERS
4 neurons
4 neurons
2 neurons
This is the output from one neuron. Hover to see it larger.
The outputs are mixed with varying weights, shown by the thickness of the lines.
OUTPUT
Test loss 0.480
Training loss 0.465
Colors shows data, neuron and weight values.
Show test data
Discretize output


Epoch
000,272
Learning rate
0.03
Activation
Sigmoid
Regularization
None
Regularization rate
0
Problem type
Classification
DATA
Which dataset do you want to use?
Ratio of training to test data: 50%
Noise: 0
Batch size: 10
REGENERATE
FEATURES
Which properties do you want to feed in?
X1
X2
X12
X22
X1X2
sin(X1)
sin(X2)
3 HIDDEN LAYERS
4 neurons
4 neurons
2 neurons
This is the output from one neuron. Hover to see it larger.
The outputs are mixed with varying weights, shown by the thickness of the lines.
OUTPUT
Test loss 0.002
Training loss 0.002
Colors shows data, neuron and weight values.
Show test data
Discretize output


Epoch
000,247
Learning rate
0.03
Activation
Linear
Regularization
None
Regularization rate
0
Problem type
Classification
DATA
Which dataset do you want to use?
Ratio of training to test data: 50%
Noise: 0
Batch size: 10
REGENERATE
FEATURES
Which properties do you want to feed in?
3 HIDDEN LAYERS
4 neurons
4 neurons
2 neurons
X1
X2
X12
X22
X1X2
sin(X1)
sin(X2)
This is the output from one neuron. Hover to see it larger.
The outputs are mixed with varying weights, shown by the thickness of the lines.
OUTPUT
Test loss 0.000
Training loss 0.000
Colors shows data, neuron and weight values.
Show test data
Discretize output


Epoch
000,257
Learning rate
0.03
Activation
ReLU
Regularization
None
Regularization rate
0
Problem type
Classification
DATA
Which dataset do you want to use?
Ratio of training to test data: 50%
Noise: 0
Batch size: 10
REGENERATE
FEATURES
Which properties do you want to feed in?
3 HIDDEN LAYERS
4 neurons
4 neurons
2 neurons
X1
X2
X12
X22
X1X2
sin(X1)
sin(X2)
This is the output from one neuron. Hover to see it larger.
The outputs are mixed with varying weights, shown by the thickness of the lines.
OUTPUT
Test loss 0.014
Training loss 0.001
Colors shows data, neuron and weight values.
Show test data
Discretize output

```
Estimated coefficients:
b_0 = 1.2363636363636363
b_1 = 1.1696969696969697
```