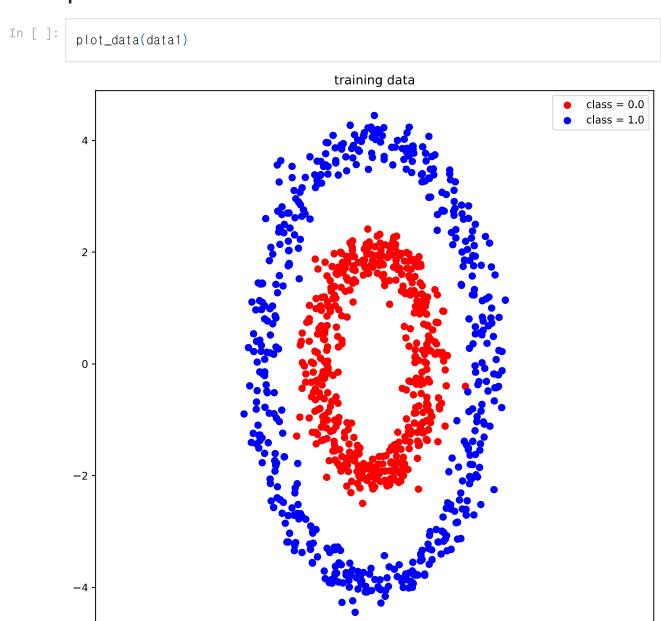
\*

### \* results

\*

# 01. plot the input data (data1) from the file [assignment\_09\_data1.txt] in blue for class 0 and in red for class 1

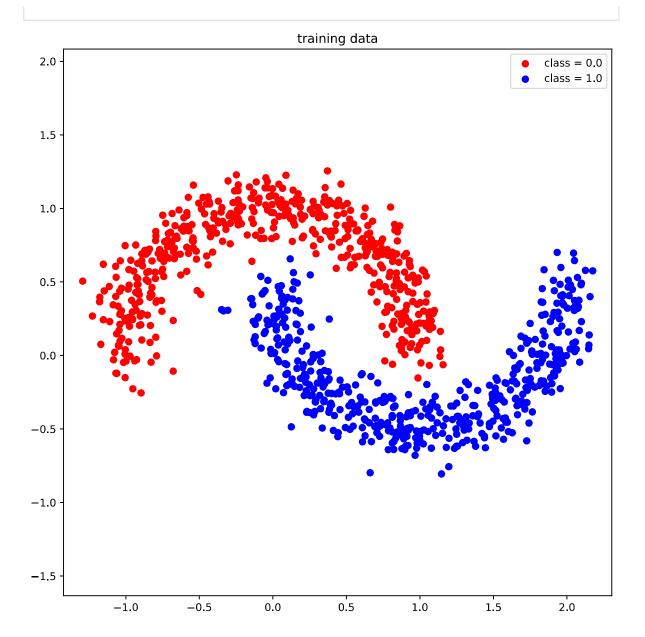


# 02. plot the input data (data2) from the file [assignment\_09\_data2.txt] in blue for class 0 and in red for class 1

<u>-</u>2

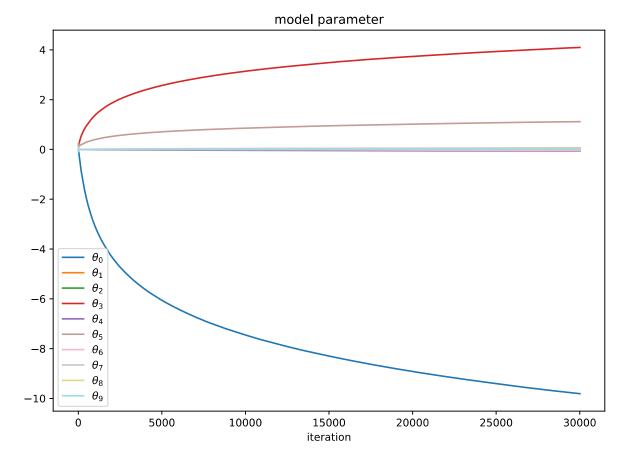
In [ ]: plot\_data(data2)

<u>-</u>4

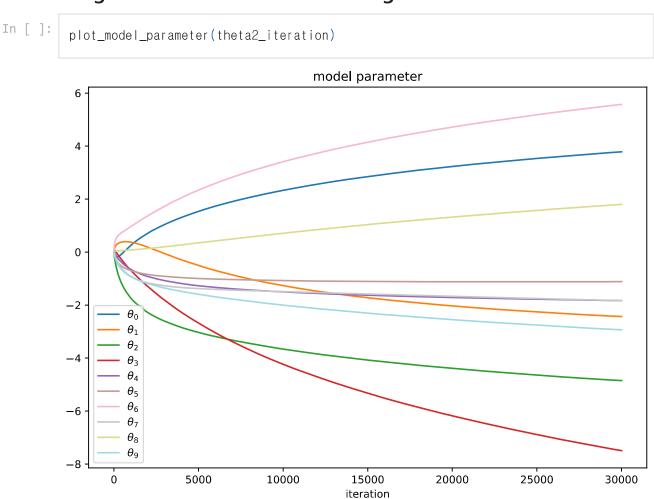


# 03. plot the values of the model parameters  $\theta$  as curves over the gradient descent iterations using different colors for data1

In [ ]: plot\_model\_parameter(theta1\_iteration)

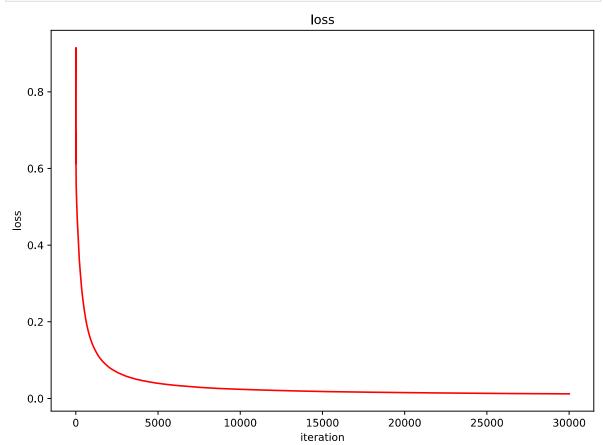


# 04. plot the values of the model parameters  $\theta$  as curves over the gradient descent iterations using different colors for data2



# # 05. plot the loss values in red curve over the gradient descent iterations for data1

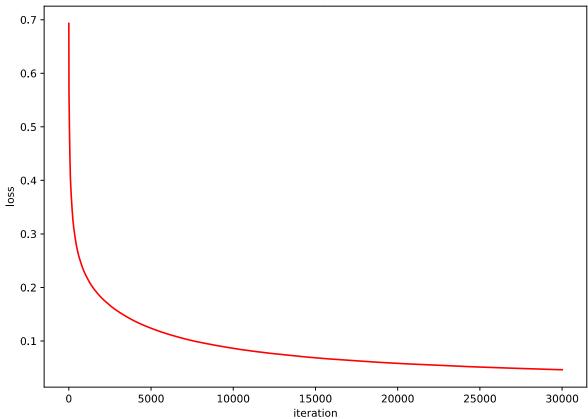




### # 06. plot the loss values in red curve over the gradient descent iterations for data2

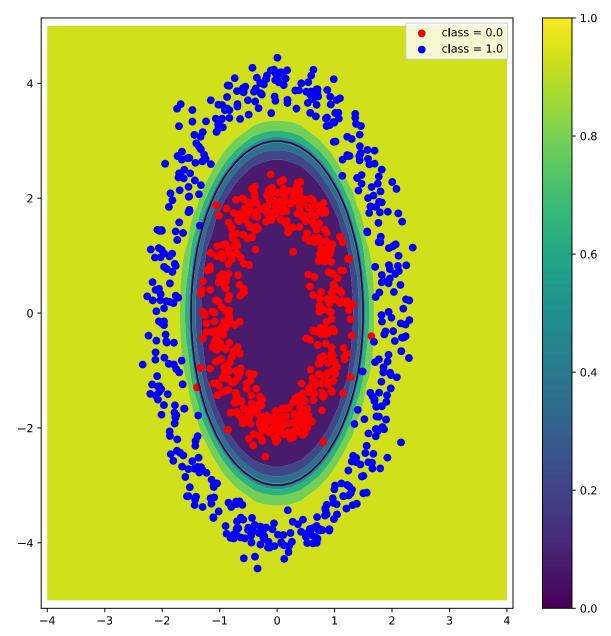
In [ ]: plot\_loss\_curve(loss2\_iteration)

loss



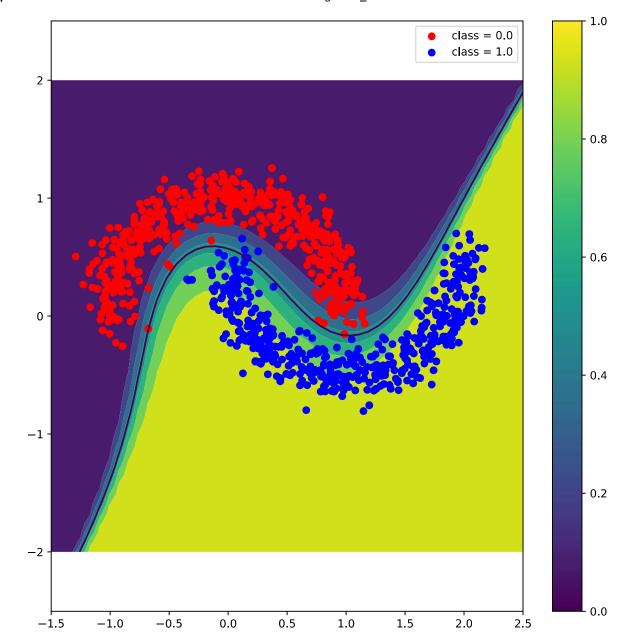
# # 07. plot the classifier with the given data points superimposed for data1

In [ ]: plot\_classifier1(data1, theta1\_optimal)



# 08. plot the classifier with the given data points superimposed for data2

```
In [ ]: plot_classifier2(data2, theta2_optimal)
```



### # 09. print out the accuracy of the obtained classifier1 for data1

```
In []: print(accuracy_classifier1)

0.999
```

#### # 10. print out the accuracy of the obtained classifier2 for data1

```
In []: print(accuracy_classifier2)

0.99

In []:
```