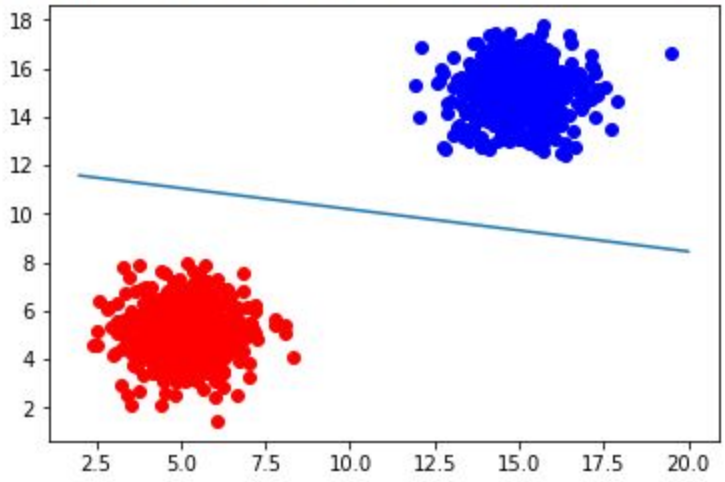
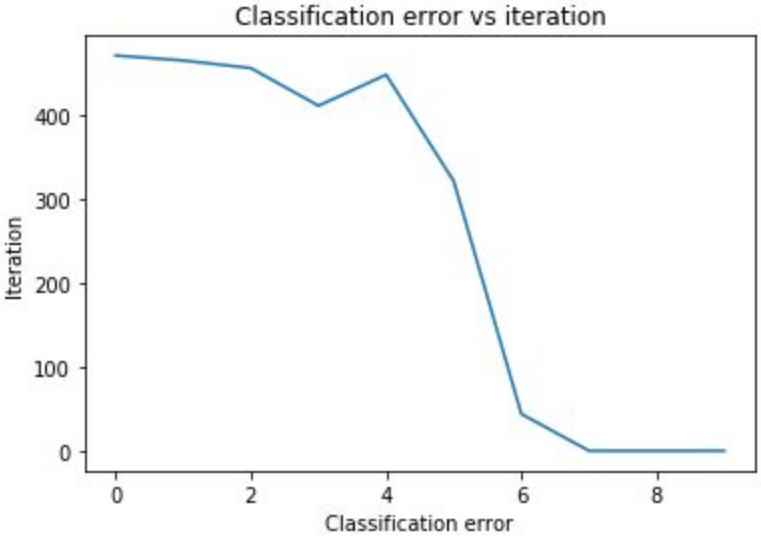
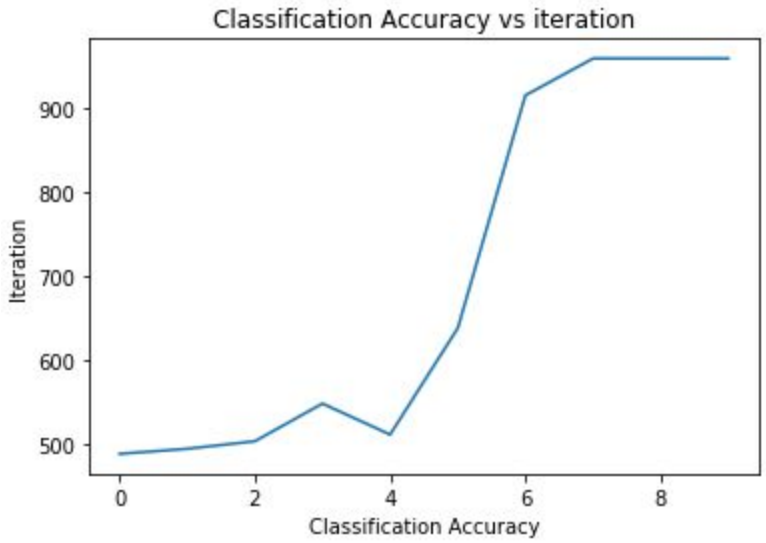
Dataset1/Train1

Alpha = 0.05

```
Weights =  [0.14800611203409408, 0.8501191797290026, -11.919999999999792]
[<matplotlib.lines.Line2D at 0x7fd739732860>]
```

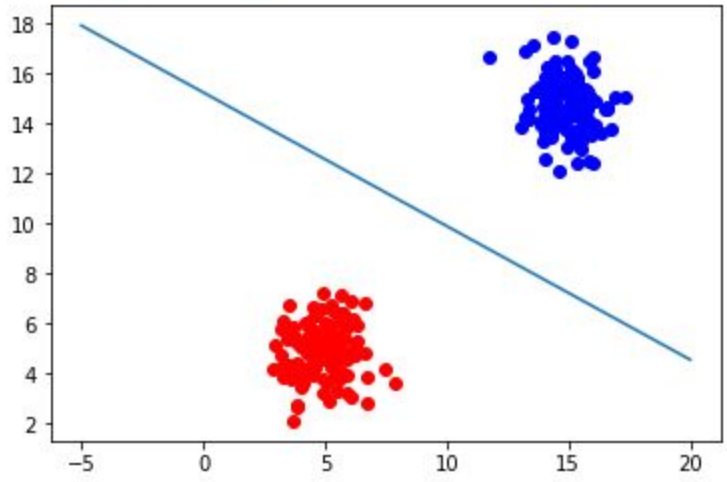






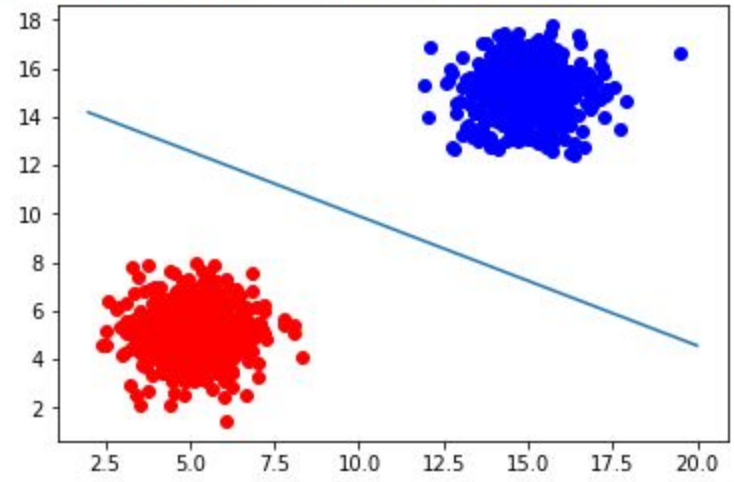
Results on test dataset

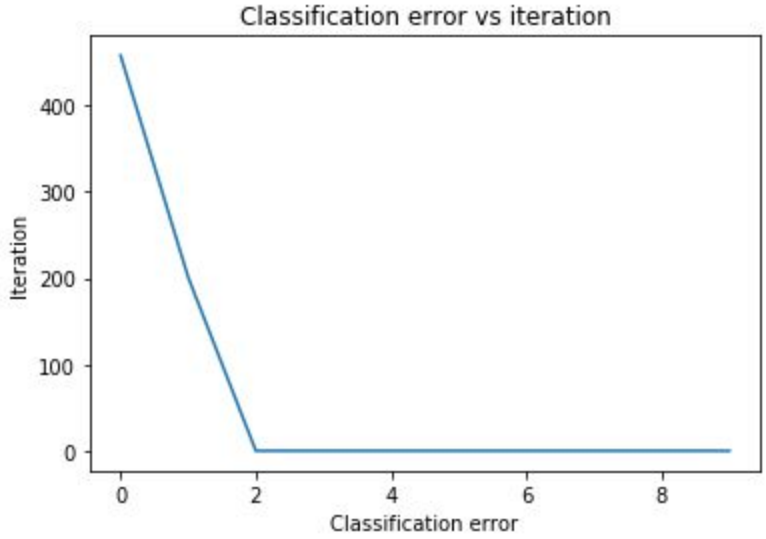
```
['true_positive', 'true_negative', 'false_positive', 'false_negative']
[117, 0, 123, 0]
```

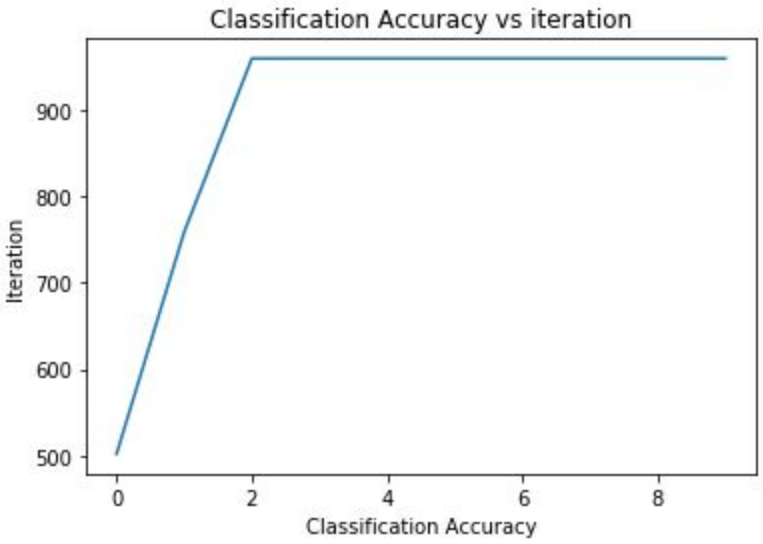


Test1:

```
Weights =  [0.6935969404521547, 1.296668091099841, -15.250000000000083]
[<matplotlib.lines.Line2D at 0x7fd737e88710>]
```



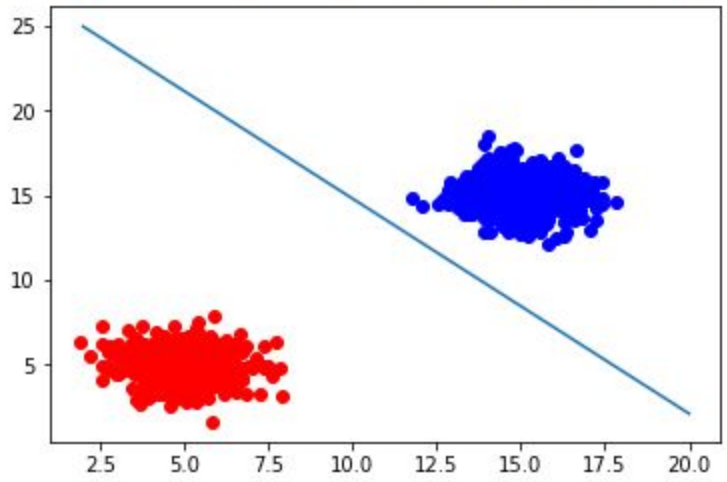




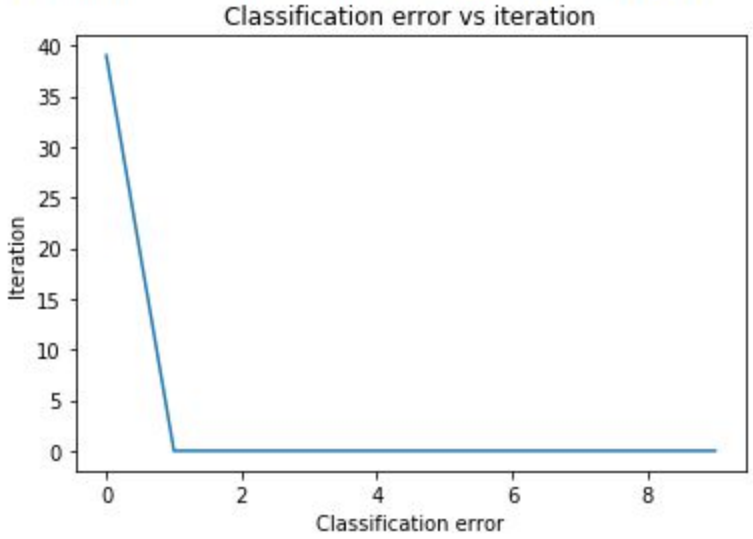
Train2:

Alpha : 1.5

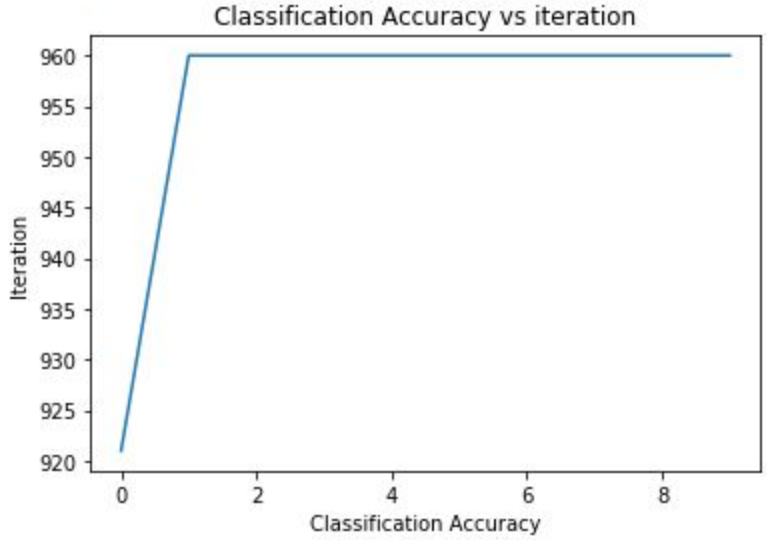
```
Weights =  [1.5913556114824372, 1.2535075342654842, -27.5]
[<matplotlib.lines.Line2D at 0x7fd724dcb5f8>]
```



```
[<matplotlib.lines.Line2D at 0x7fd724c01fd0>]
```



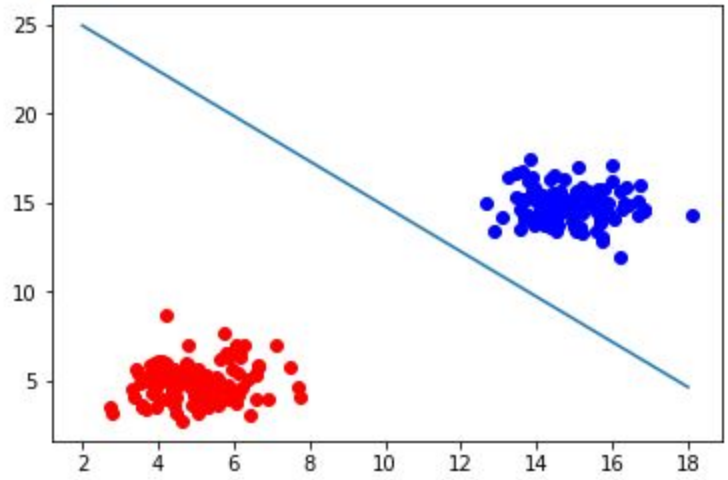

```
[<matplotlib.lines.Line2D at 0x7fd724b109b0>]
```



\

Results on test dataset

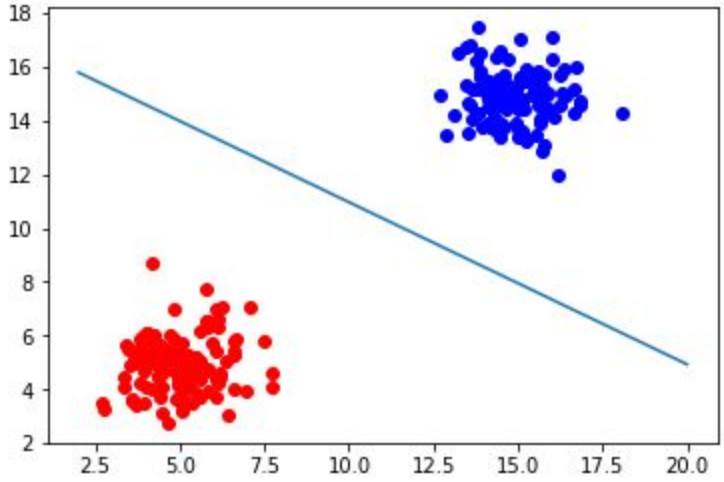
```
['true_positive', 'true_negative', 'false_positive', 'false_negative']
[122, 0, 118, 0]
```



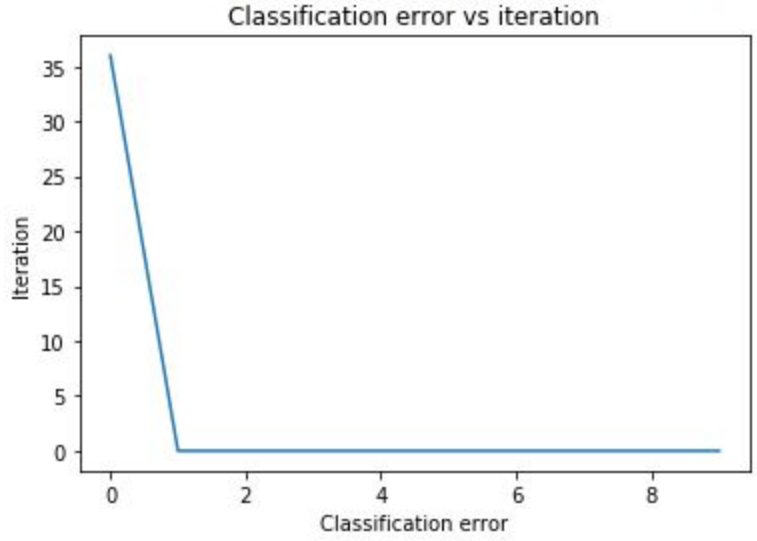
Test2:

Alpha : 1.0

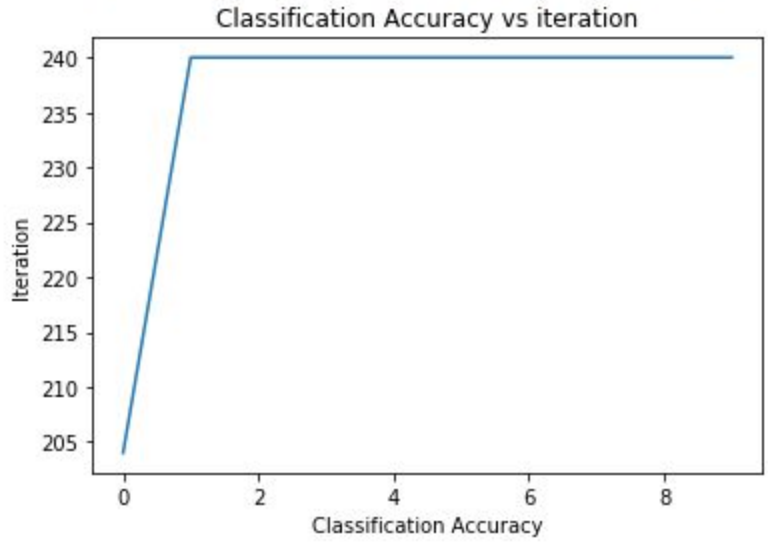
```
Weights =  [0.5363933958014195, 0.8888035474653639, -17.0]
[<matplotlib.lines.Line2D at 0x7fd723963f60>]
```



```
[<matplotlib.lines.Line2D at 0x7fd7238bd668>]
```

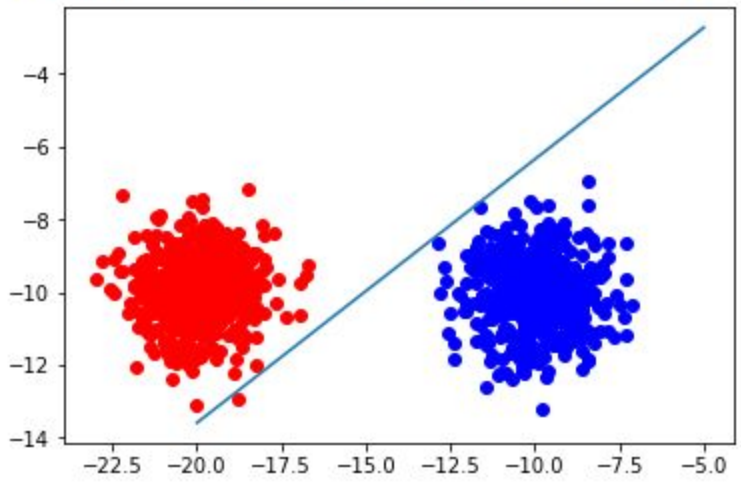



```
[<matplotlib.lines.Line2D at 0x7fd723866d68>]
```

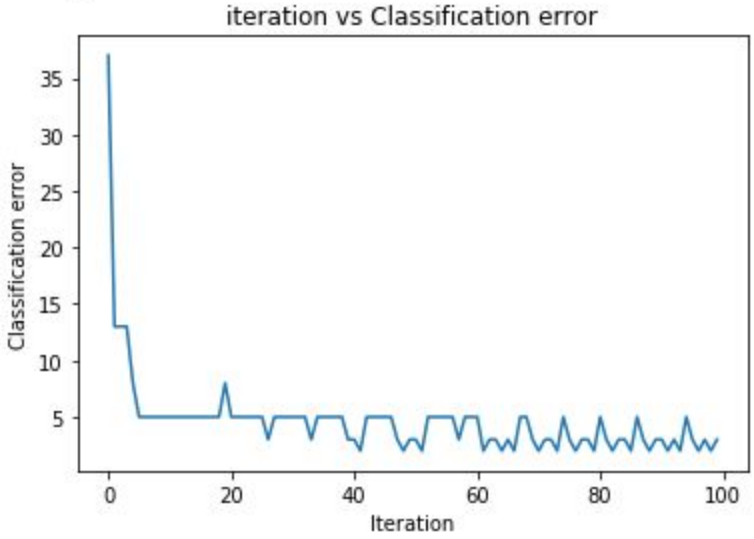


Train3:
Alpha : 0.001
Bias : -1

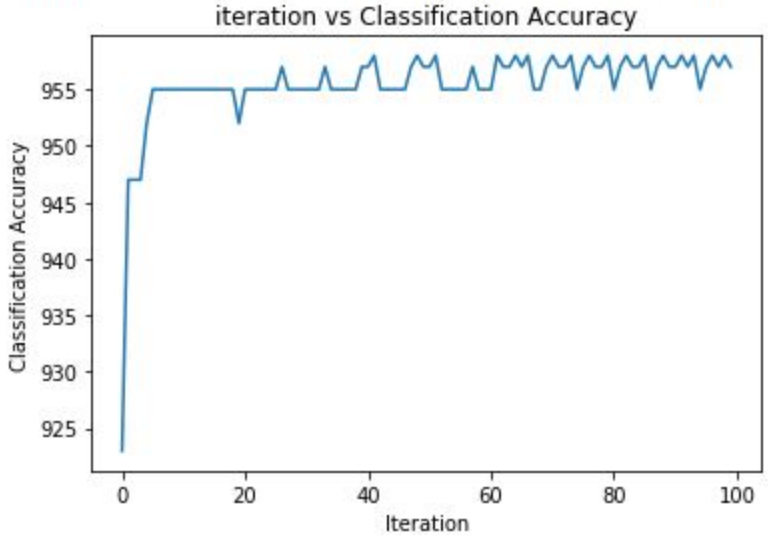
```
Weights =  [158.57763084837558, -218.74875300558708, -0.9029999999999999]
[<matplotlib.lines.Line2D at 0x7f4f0266c6a0>]
```




```
[<matplotlib.lines.Line2D at 0x7f4f02676828>]
```

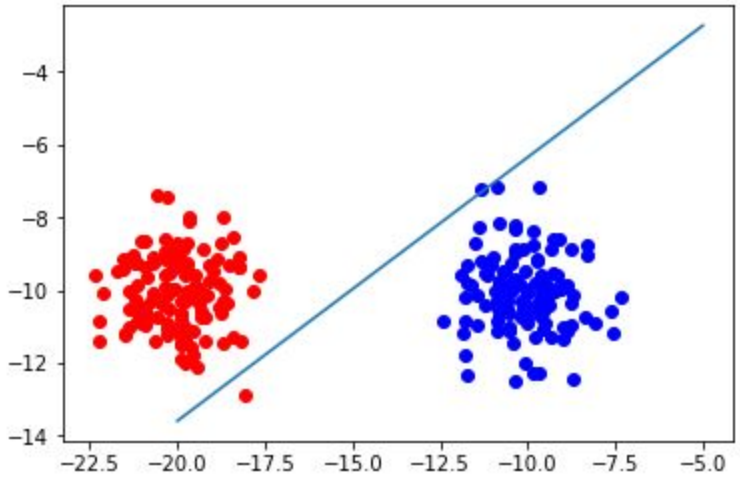


```
[<matplotlib.lines.Line2D at 0x7f4f0246a8d0>]
```



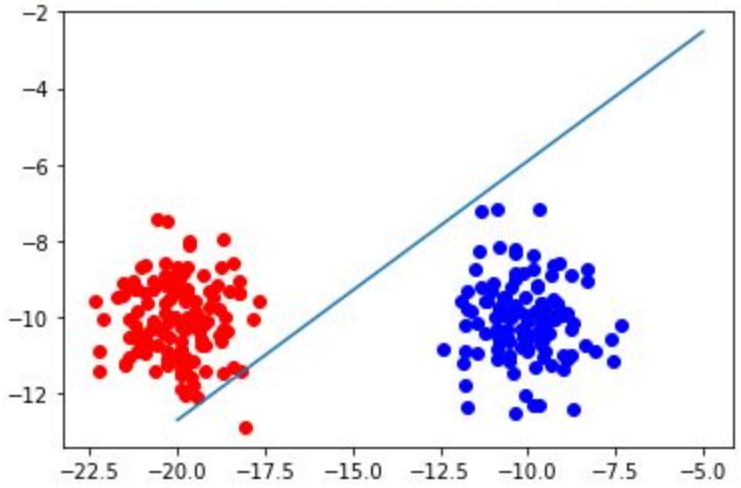
Results on test dataset

```
['true_positive', 'true_negative', 'false_positive', 'false_negative']
[115, 0, 123, 2]
```

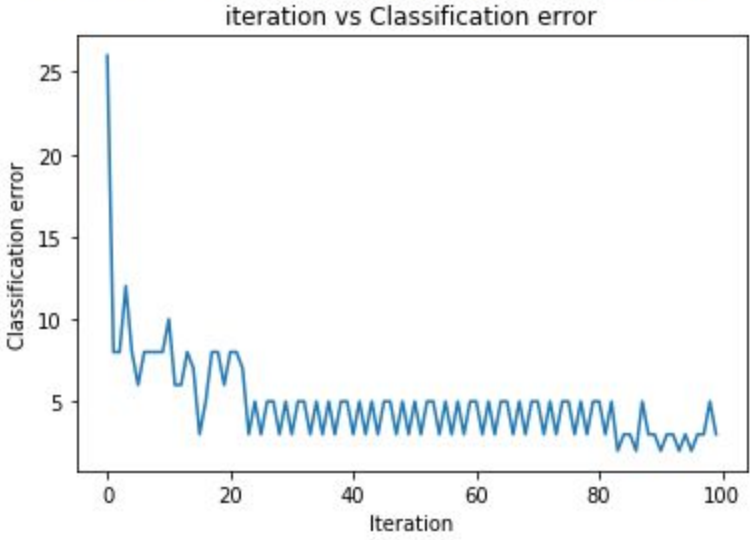


Test3:

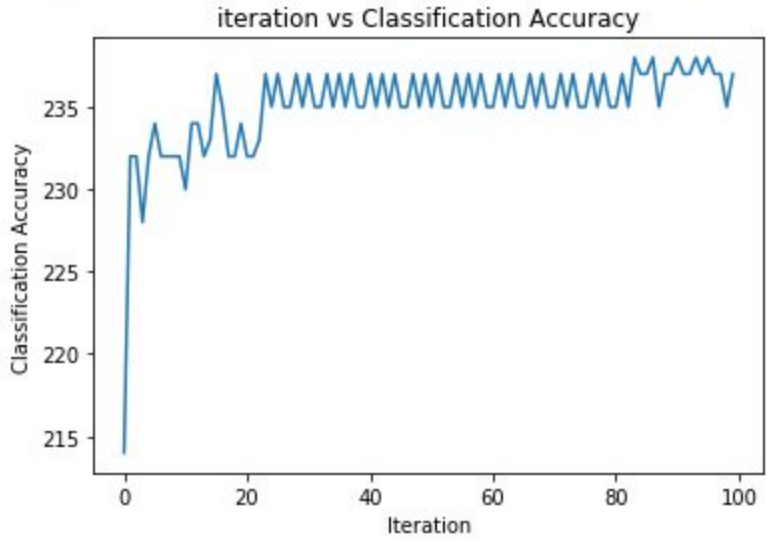
```
Weights =  [141.66278463486887, -208.73885870485674, -0.8819999999999999]
[<matplotlib.lines.Line2D at 0x7f4f01717940>]
```




```
[<matplotlib.lines.Line2D at 0x7f4f016a6278>]
```



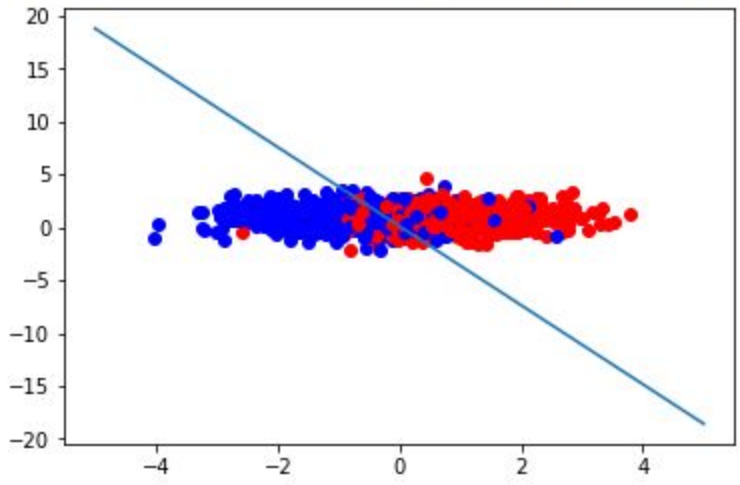
```
[<matplotlib.lines.Line2D at 0x7f4f01692eb8>]
```



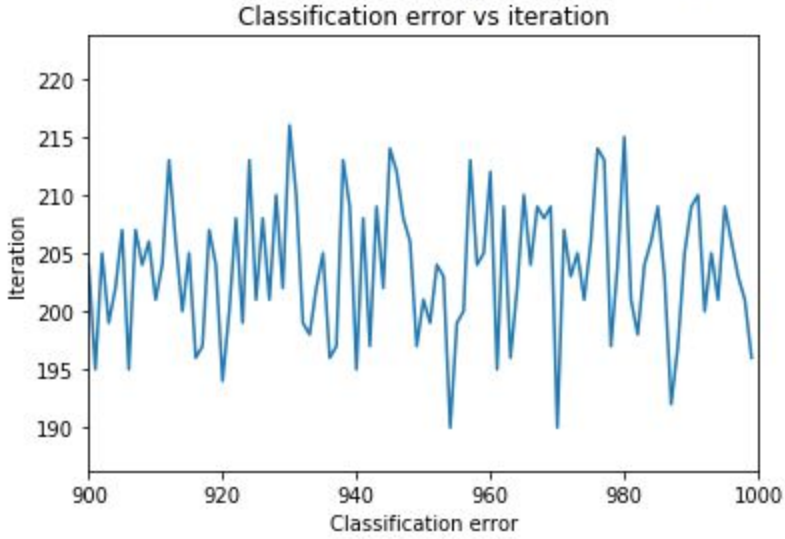
Train4:

Alpha = 0.1

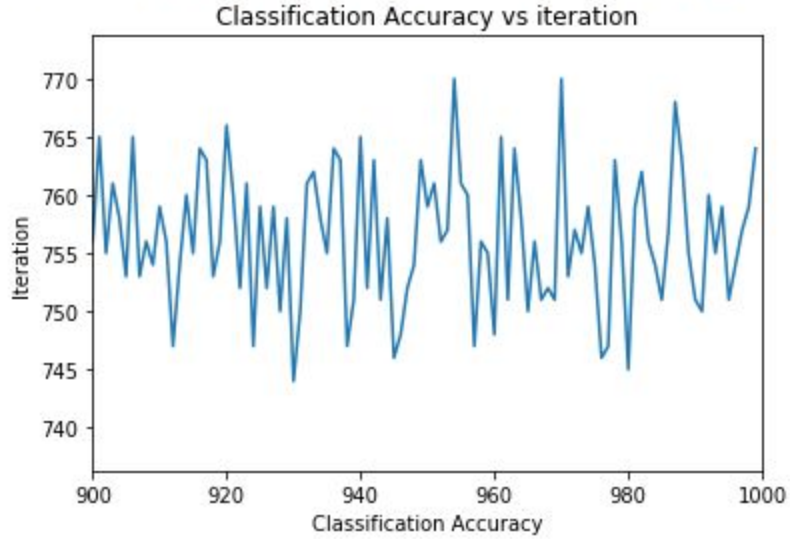
```
Weights =  [-1.3482955009601412, -0.36098549111427647, -0.09999999999999992]
[<matplotlib.lines.Line2D at 0x7fd7166947b8>]
```



```
[<matplotlib.lines.Line2D at 0x7fd716365898>]
```

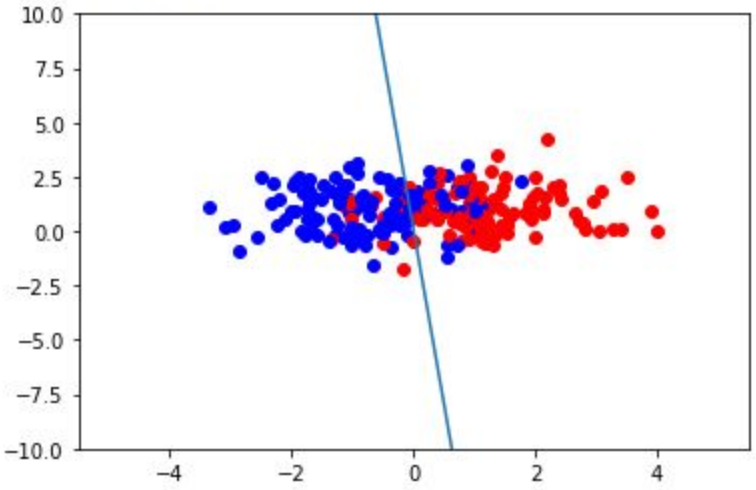



```
[<matplotlib.lines.Line2D at 0x7fd71633e7f0>]
```



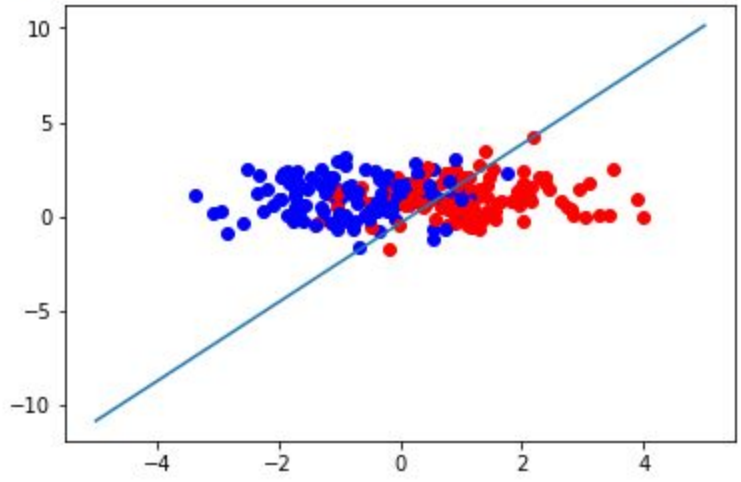
Results on test dataset

```
['true_positive', 'true_negative', 'false_positive', 'false_negative']
[91, 12, 103, 34]
```

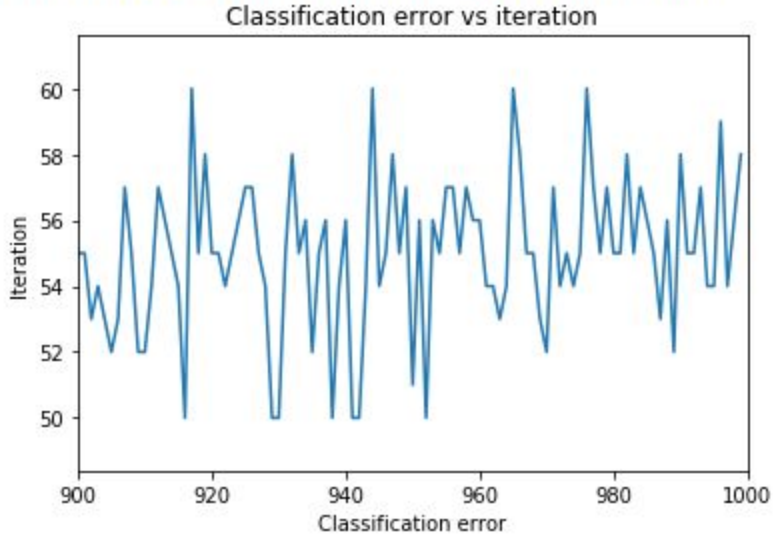


Test4:
Alpha = 0.05

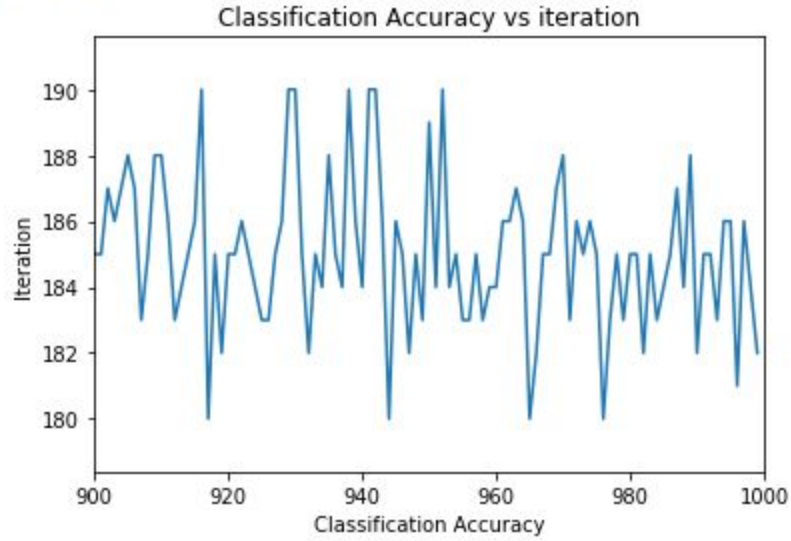
```
Weights =  [-2.9273285048743833, 1.3966784461226063, 0.34999999999999964]
[<matplotlib.lines.Line2D at 0x7fd7158fe860>]
```



```
[<matplotlib.lines.Line2D at 0x7fd71587c2b0>]
```

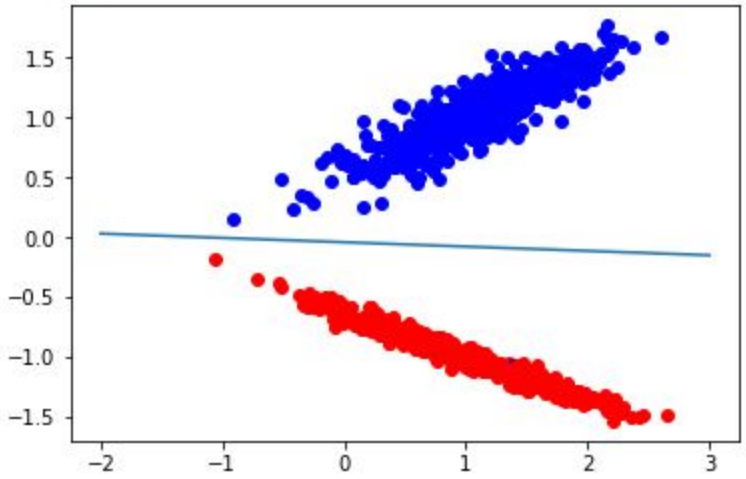



```
[<matplotlib.lines.Line2D at 0x7fd7157dbc50>]
```

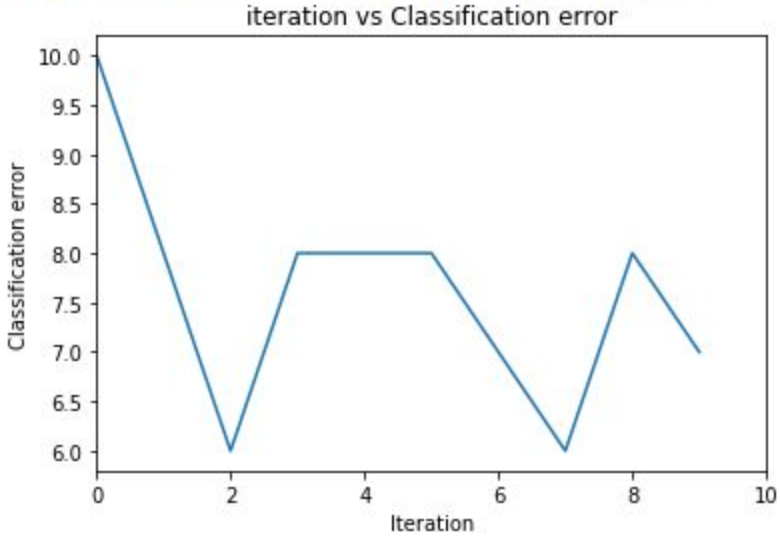


Train5:
Alpha : 0.48

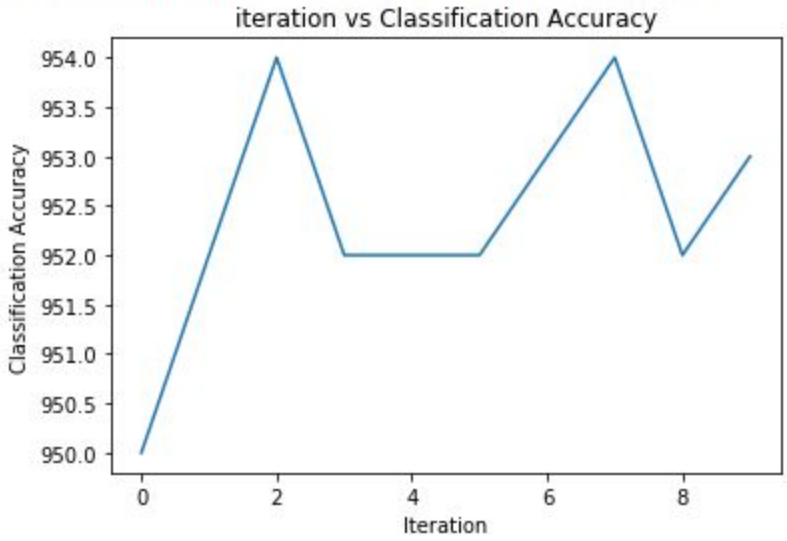
```
Weights =  [0.0614066647214786, 1.6971968928636958, 0.040000000000000036]
[<matplotlib.lines.Line2D at 0x7fd70e933c88>]
```




```
[<matplotlib.lines.Line2D at 0x7fd7142ecb00>]
```

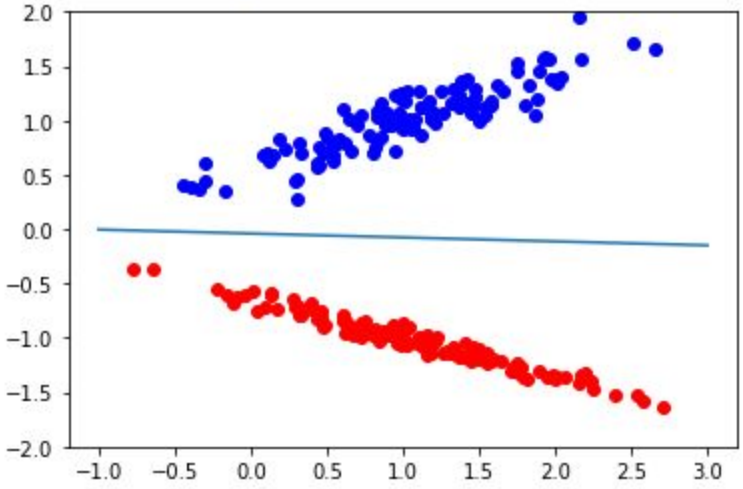


```
[<matplotlib.lines.Line2D at 0x7fd71482c6a0>]
```



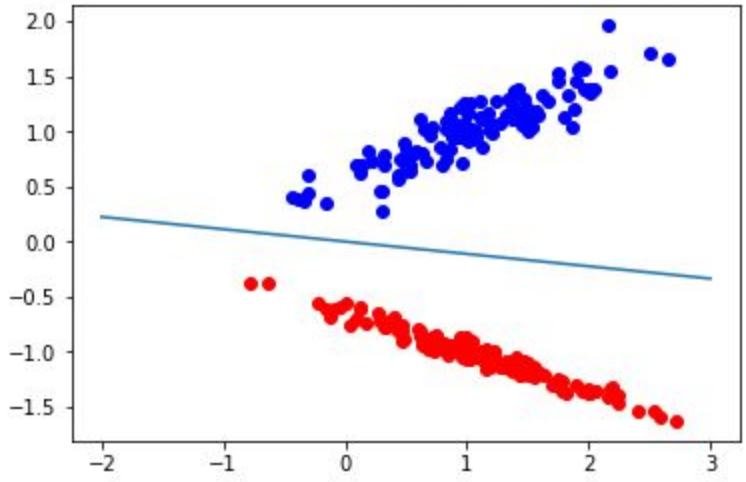
Results on test dataset

```
['true_positive', 'true_negative', 'false_positive', 'false_negative']
[118, 0, 122, 0]
```

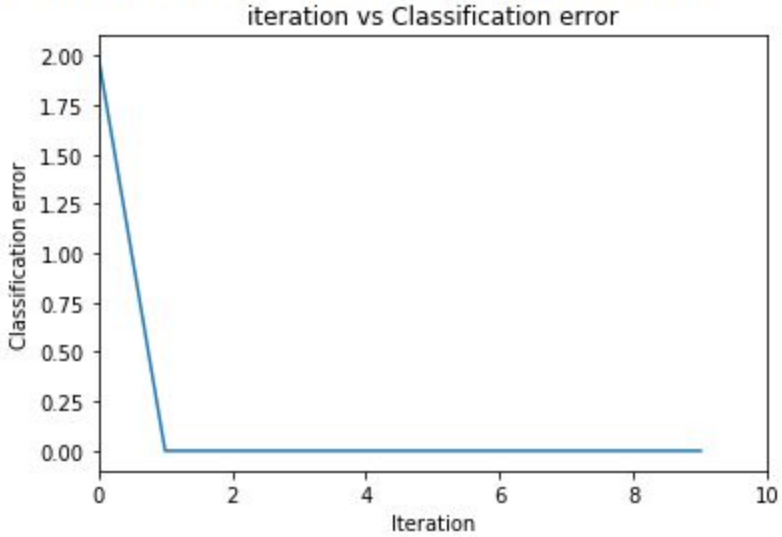


Test5:
Alpha : 0.1
Bias = 0.0 (after this bias is zero)

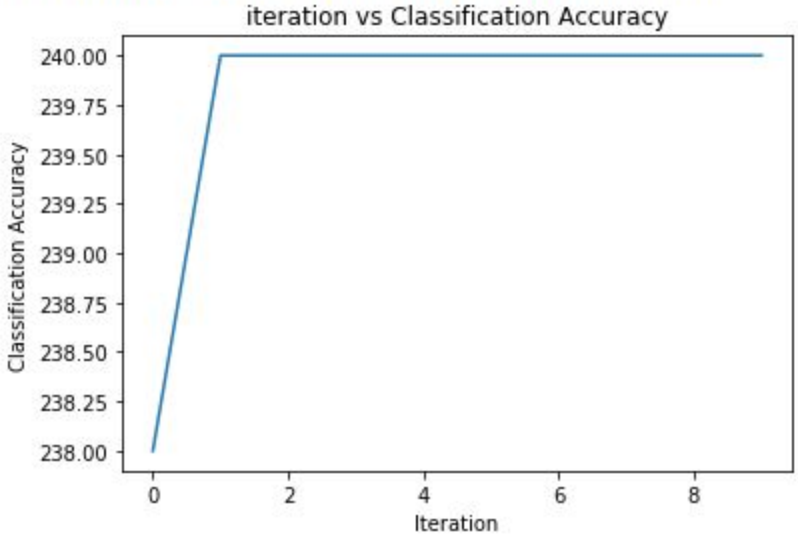
```
Weights =  [0.30221393539355645, 2.697273723694831, 0.0]
[<matplotlib.lines.Line2D at 0x7fd7064b1668>]
```




```
[<matplotlib.lines.Line2D at 0x7fd7064562e8>]
```



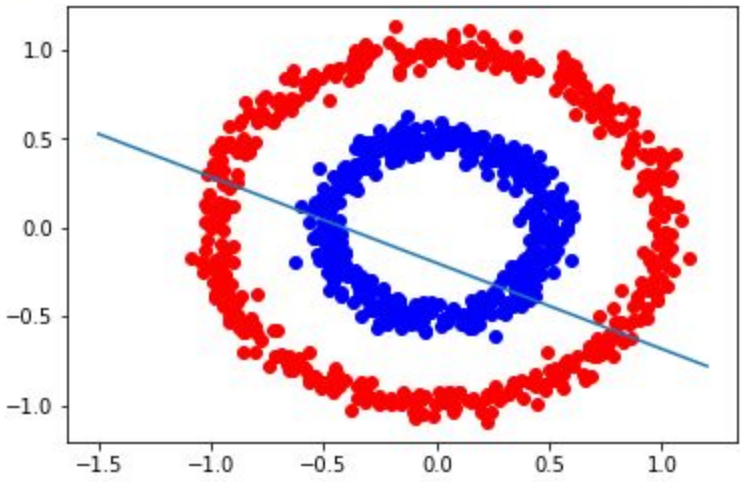
```
[<matplotlib.lines.Line2D at 0x7fd7063a9ac8>]
```



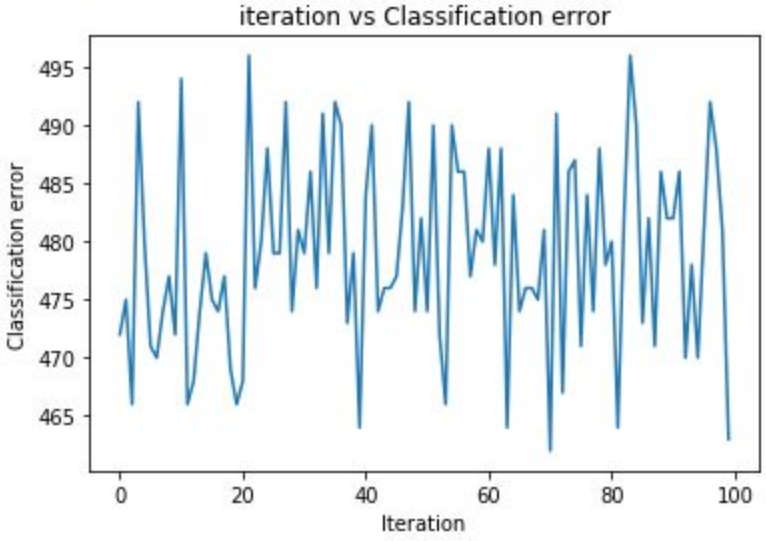
Train6:

Alpha : 0.1

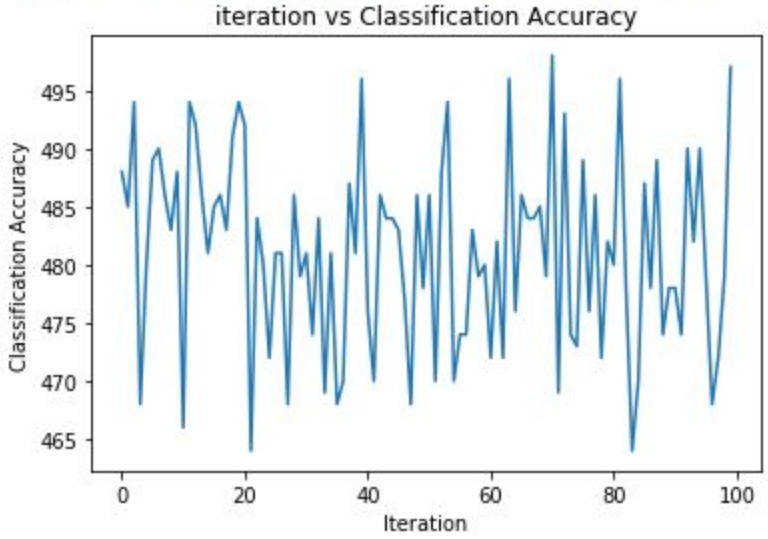
```
Weights =  [-0.12498894881628705, -0.2581402145079001, 0.19999999999999998]
[<matplotlib.lines.Line2D at 0x7fd702a401d0>]
```



```
[<matplotlib.lines.Line2D at 0x7fd702906f60>]
```

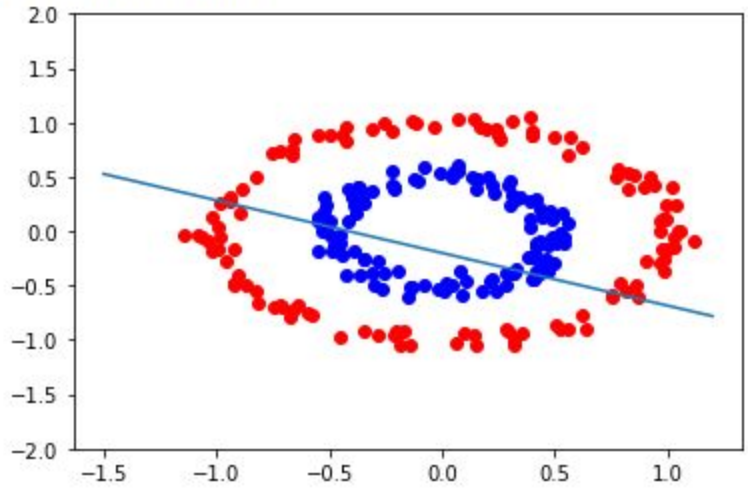



```
[<matplotlib.lines.Line2D at 0x7fd7028635c0>]
```



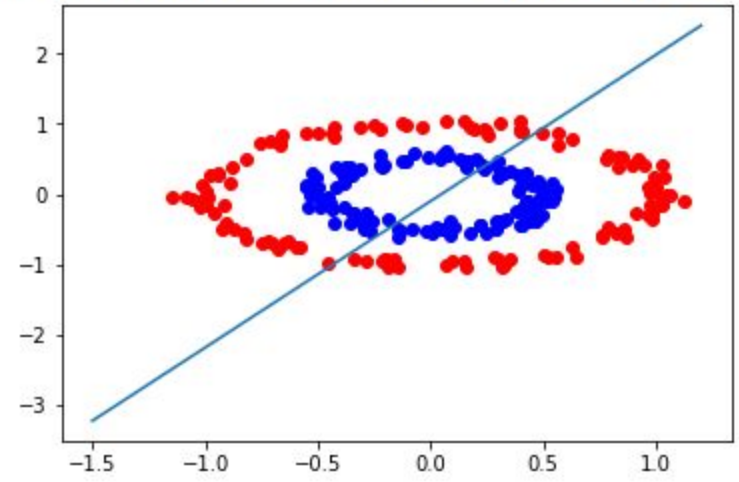
Results on test dataset

```
['true_positive', 'true_negative', 'false_positive', 'false_negative']
[120, 89, 31, 0]
```

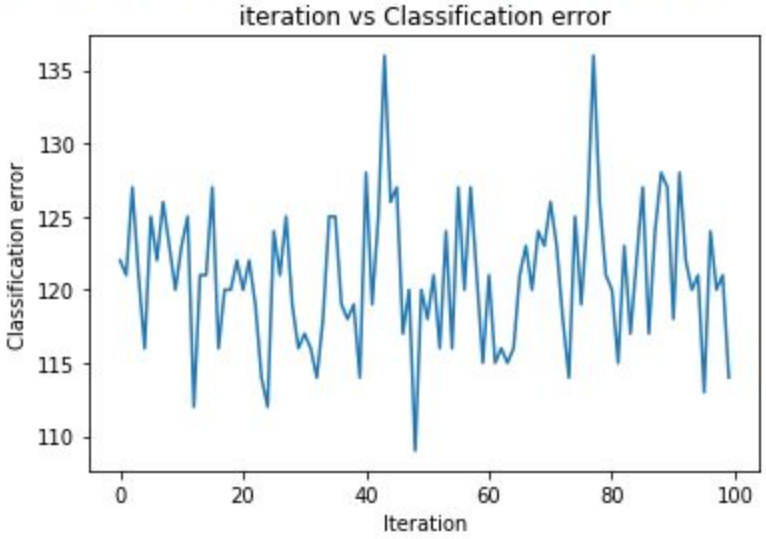


Test6:

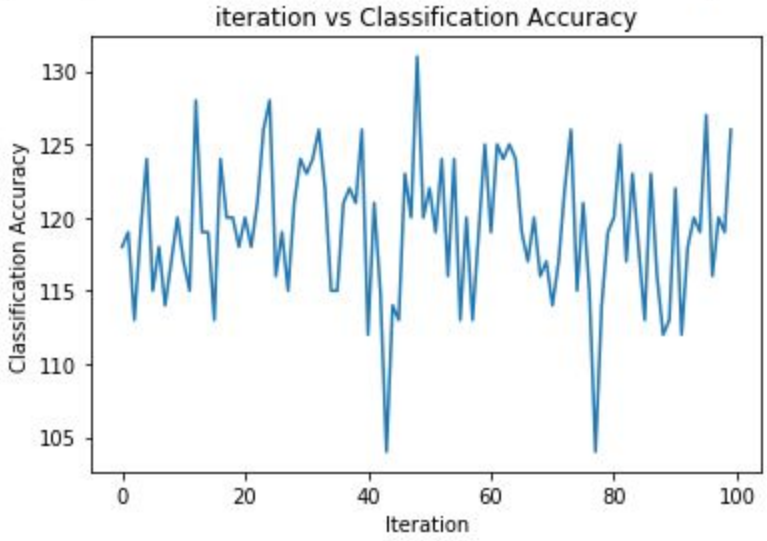
```
Weights =  [-0.6240726206135451, 0.2995951151462011, 0.09999999999999998]
[<matplotlib.lines.Line2D at 0x7fd701e37f28>]
```



```
[<matplotlib.lines.Line2D at 0x7fd701d06cf8>]
```

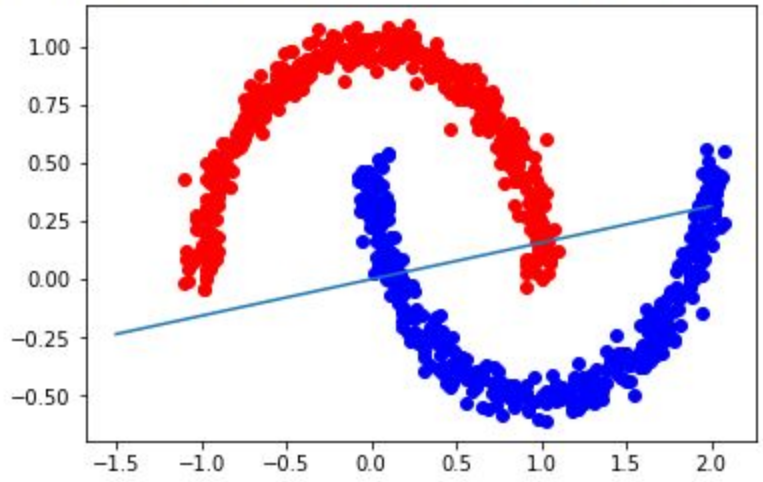



```
[<matplotlib.lines.Line2D at 0x7fd701d38240>]
```

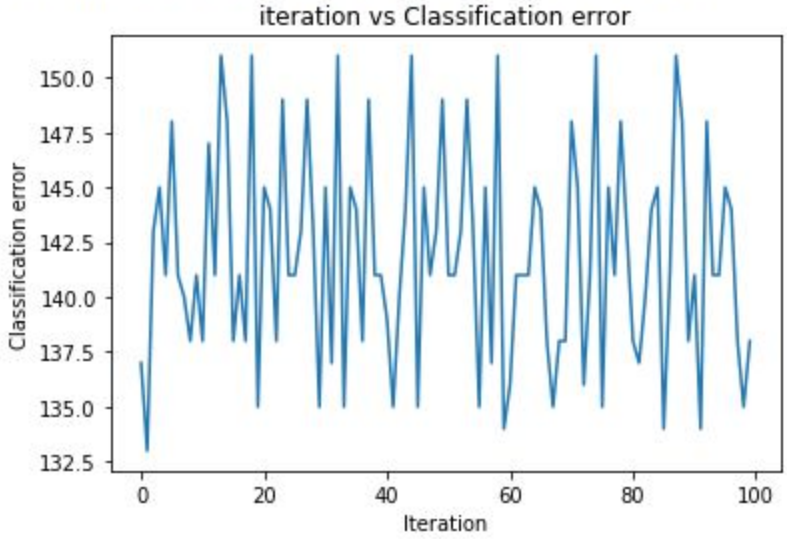


Train7:
Alpha : 1
Bias 1

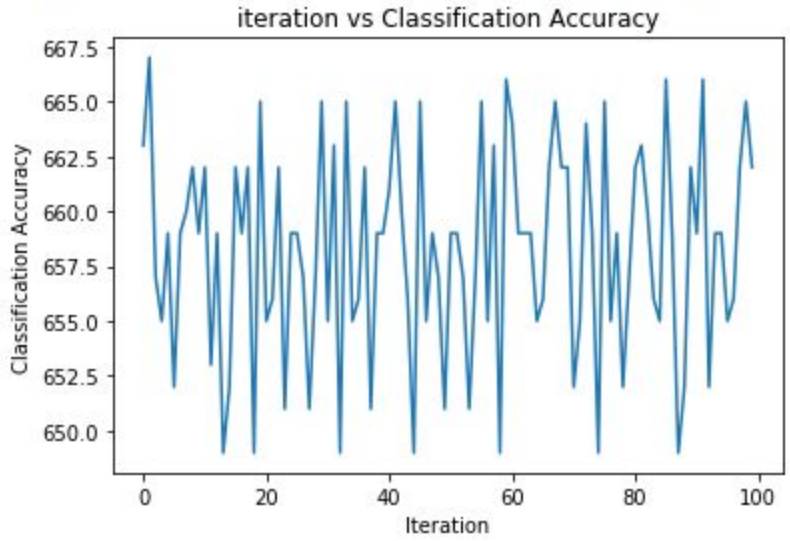
```
Weights =  [0.7362269789335152, -4.697080922033649, 0]
[<matplotlib.lines.Line2D at 0x7fd6fef40e48>]
```




```
[<matplotlib.lines.Line2D at 0x7fd6fedf9828>]
```

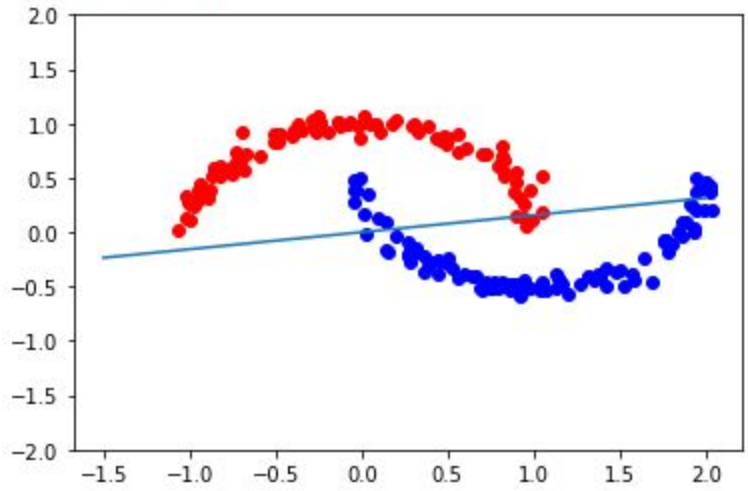


```
[<matplotlib.lines.Line2D at 0x7fd6feda23c8>]
```



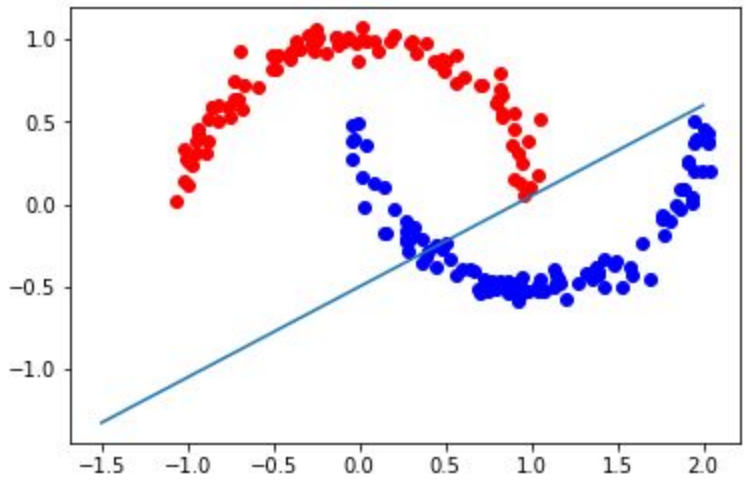
Results on test dataset

```
['true_positive', 'true_negative', 'false_positive', 'false_negative']
[88, 3, 91, 18]
```

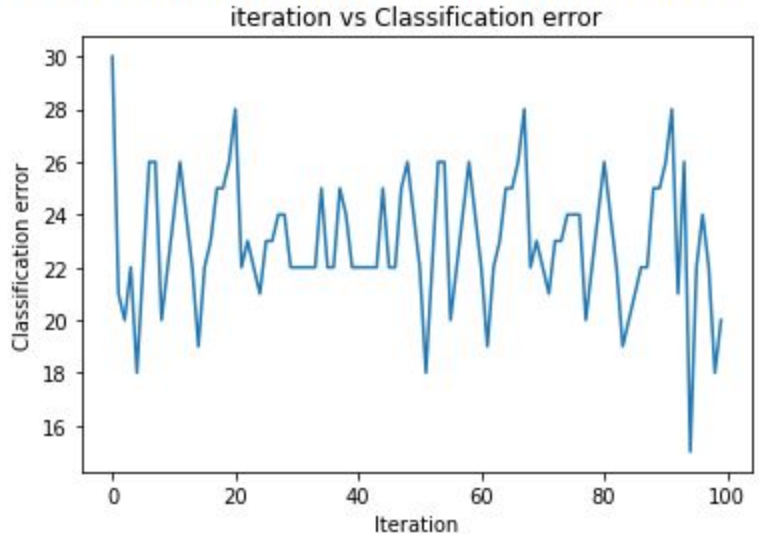


Test7 :”
Alpha = 0.5

```
Weights =  [1.8357619876291515, -3.3382874069646853, 0.5]
[<matplotlib.lines.Line2D at 0x7fd6fdfe43c8>]
```




```
[<matplotlib.lines.Line2D at 0x7fd6fdf53198>]
```



```
[<matplotlib.lines.Line2D at 0x7fd6fdf71cf8>]
```