

CLL788

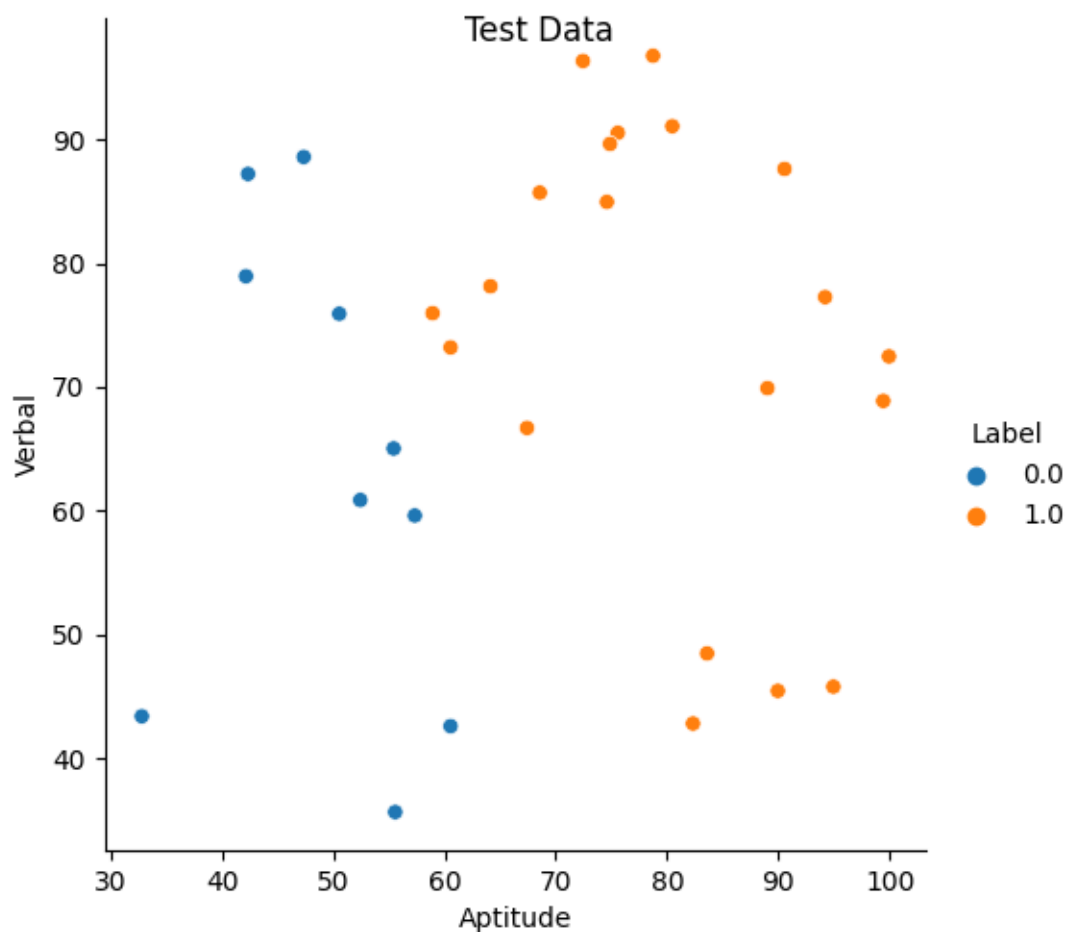
Assignment – 2

1(a). The code is uploaded as ass2_q1a.py

We get the following value as final value of the weight, w:

```
[[ -4.9    0.20528105  0.03232382]]
```

This is the scatter plot of test data obtained.



The output obtained is stored as Result_1a.xlsx

(b) The code is uploaded as ass2_q1b.py

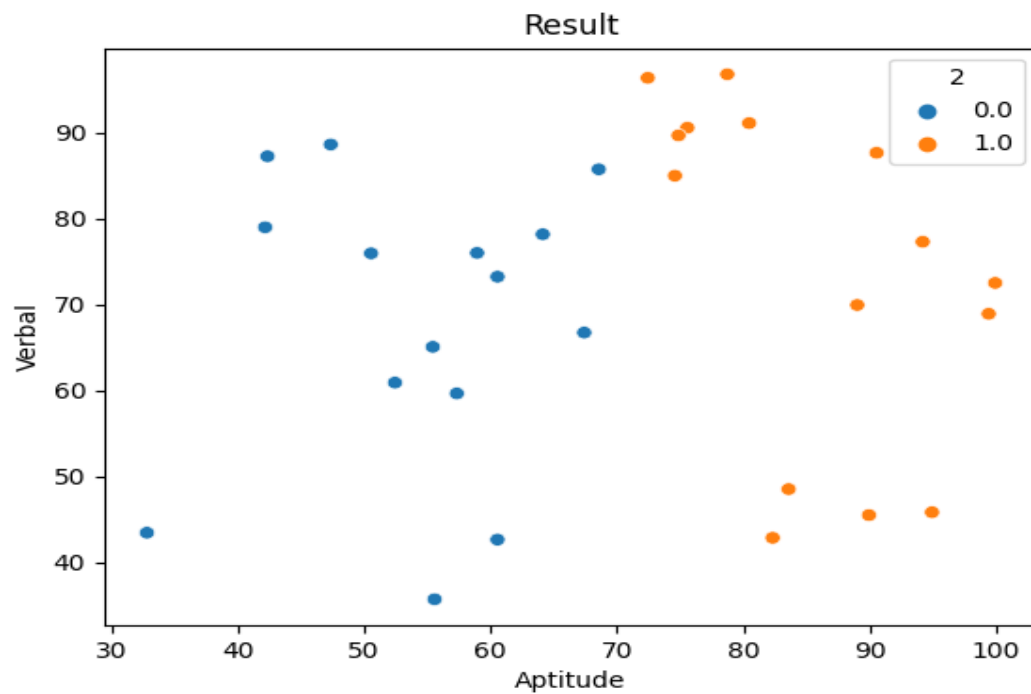
(c) The code is uploaded as ass2_q1c.py

We get the following value as final value of the weight, w:

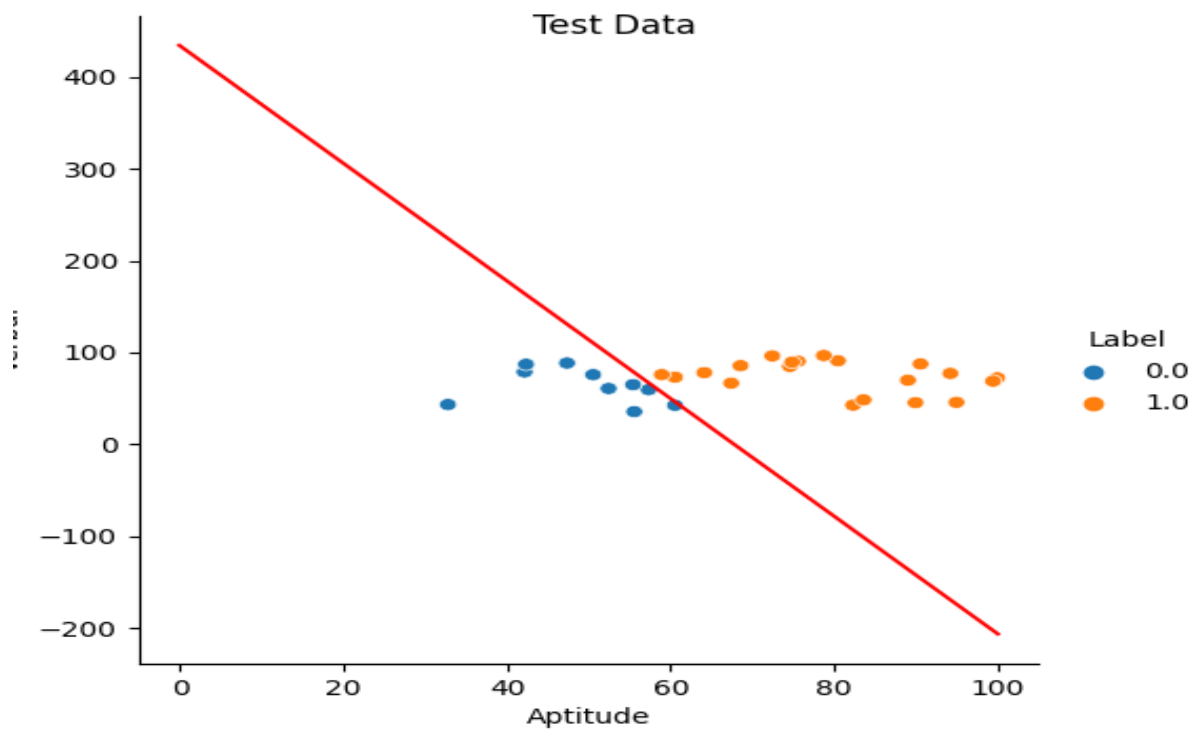
```
[[ -4.71973859  0.06900925  0.00665465]]
```

The output obtained is stored as “Result_1c.xlsx”.

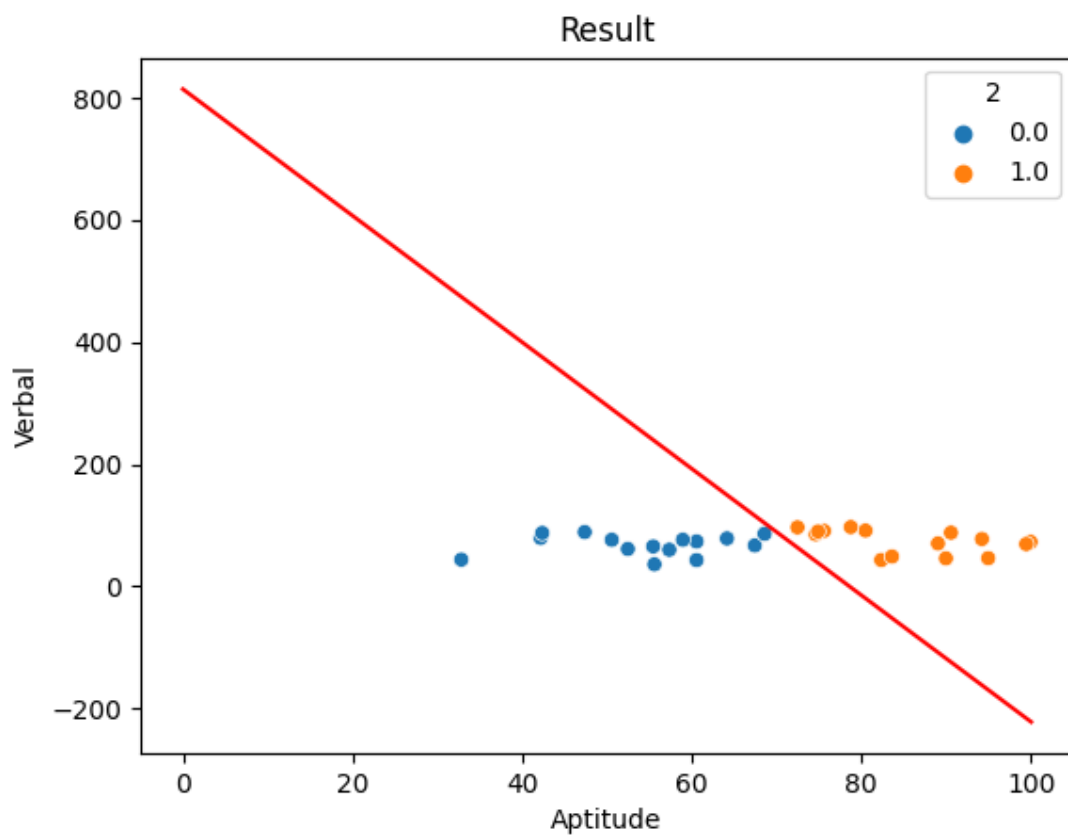
The scatter plot of test data obtained is:



(d) On analysing both these methods, we can see that single layer perceptron is slightly less accurate than the logistic regression method. This can be seen by comparing the accuracies of the prediction measured on the training dataset. The logistic regression method performs much better on the training dataset than single layer perceptron.



This was the graph for single layer perceptron classifier.



This was graph for Logistic Regression Classifier

