

Weilin Lu

Assign-10

Linear Discriminant Analysis

Q1

LDA equation:

Equation of LDA is : $y = -10.084x + 0.656$

QDA equation

Equation of QDA is : $y = 0.133x^2 + 0.922x + 5.512$

Q2

LDA accuracy:100%

The Accuracy is 100.0%

QDA accuracy:100%

The Accuracy is 100.0%

Q3

LDA Confusion matrix

```
LDA Confusion matrix for Year 2
TP:  27
FP:  0
FN:  0
TN:  25
```

QDA Confusion matrix

```
QDA Confusion matrix for Year 2
TP:  27
FP:  0
FN:  0
TN:  25
```

Q4

LDA:

```
TPR for Year 2 is 1.0
TNR for Year 2 is 1.0
```

QDA:

```
TPR for Year 2 is 1.0
TNR for Year 2 is 1.0
```

Q5

The long term strategy will has bigger amount at the end of the year.

