STATS 202A: Assignment #6
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Problem 1

Write R code for logistic regression, based on QR code for linear regression.

```
            [,1]
[1,]  0.03673839
[2,] -1.00948890
[3,] -0.59406164
[4,] -2.10121244
         X1          X2          X3          X4
 0.03673839 -1.00948889 -0.59406163 -2.10121243
```

Figure 1: Comparison of beta using logistic regression

Problem 2

Write R code for extreme gradient boosting, using one layer tree as base function.

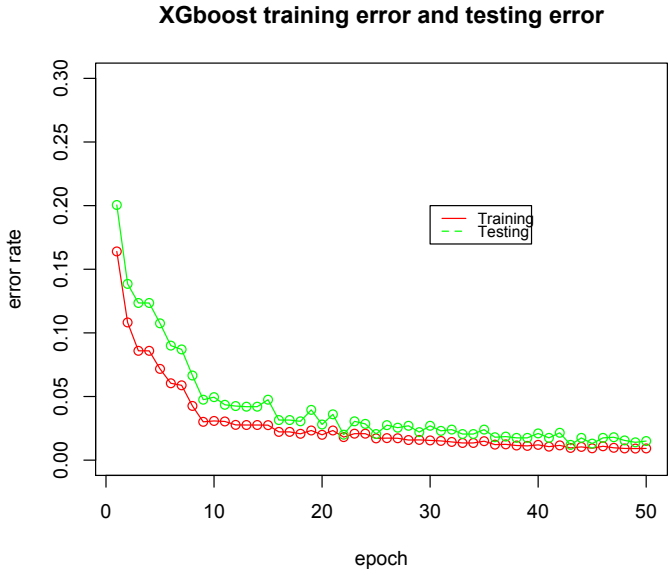

Figure 2: The training error and testing error graph of xgboost

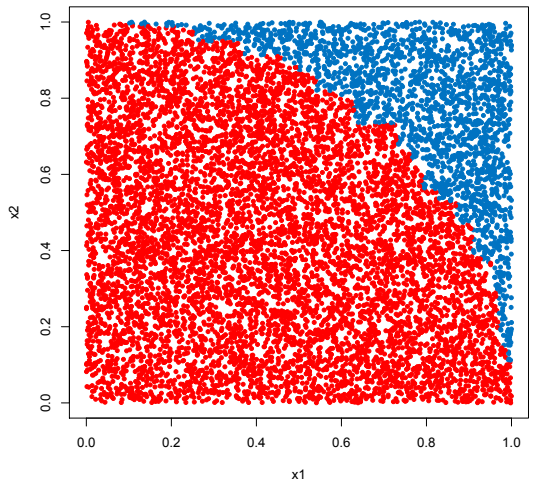

Figure 3: The classification result of xgboost

Problem 3

Write R code for extreme gradient boosting, using one layer tree as base function.

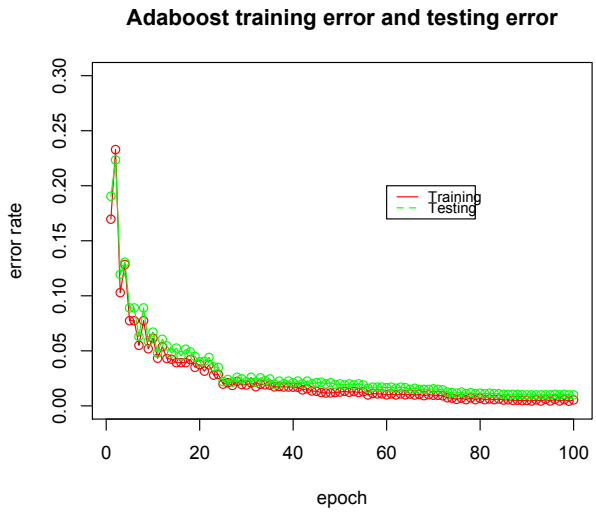

Figure 4: The training error and testing error graph of adaboost

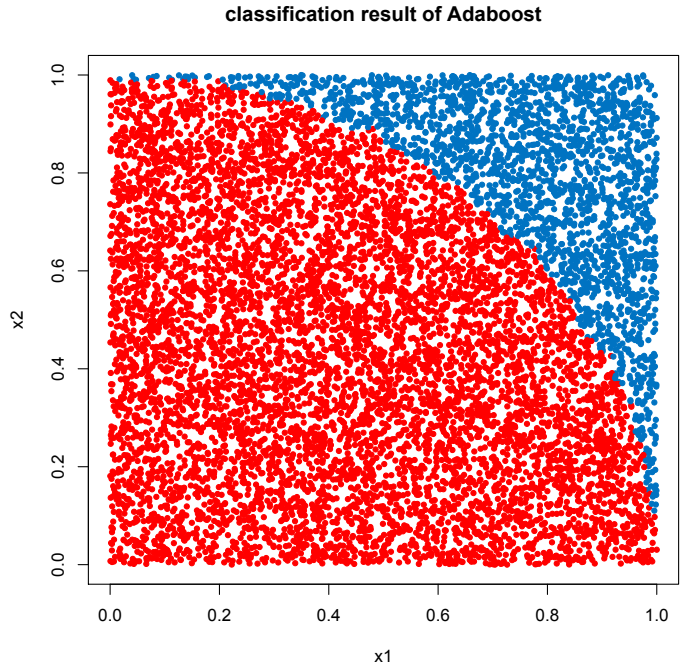

Figure 5: The classification result of Adaboost