Exercise 1:

Given are the results of a scoring algorithm and the associated *true* classes of 10 observations:

ID	Actual Class	Score
1	0	0.33
2	0	0.27
3	1	0.11
4	1	0.38
5	1	0.17
6	0	0.63
7	1	0.62
8	1	0.33
9	0	0.15
10	0	0.57

a) Create a confusion matrix assuming the decision boundary at 0.5.

b) Calculate: precision, sensitivity, negative predictive value, specificity, accuracy, error rate and F-measure.

c) Draw the ROC curve and interpret it. Feel free to use R for the drawing.

d) Calculate the AUC.