**Question 2.9(c)**

**> data<-read.table('data 2.9.txt', header=T)**

**> xyfit <- lm(data$Y~ data$X)**

**> summary(xyfit)**

Call:

lm(formula = data$Y ~ data$X)

Residuals:

Min 1Q Median 3Q Max

-0.98608 -0.25048 -0.04539 0.47659 0.64531

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 2.157611 2.014430 1.071 0.309

data$X 0.001931 0.003510 0.550 0.594

Residual standard error: 0.5326 on 10 degrees of freedom

Multiple R-squared: 0.02937, Adjusted R-squared: -0.06769

F-statistic: 0.3026 on 1 and 10 DF, p-value: 0.5943

**> anova(xyfit)**

Analysis of Variance Table

Response: data$Y

Df Sum Sq Mean Sq F value Pr(>F)

data$X 1 0.08585 0.085847 0.3026 0.5943

Residuals 10 2.83698 0.283698

**Conclusion**

The p-value for the independent variable GMAT is 0.594, which is a high value. It is quite larger than the significance level of 0.05. It has strong evidence to against the hypothesis. Therefore, GMAT is not an important predictor variable at significance level of 0.05.