1. 1.2 Develop a regression model to forecast the DEOM figures based on the three independent variables (AAA, 3-4, and D3-4). Evaluate the model the strength of the model using the appropriate test and comment on the strength of the model (using α = 0.01).

n – k – 1 = 48
alpha = 0.01

CV(t) = 5.841
CV(F) = 4.218

The t-stats of independent variables (AAA) Bond Yield and (3-4) Government Bond Yield successfully reject the null hypothesis by exceeding the critical value. This proves these variables are significant predictors in predicting variation of DEOM figures. On the other hand, the change in bond yield variable does not successfully reject the null hypothesis, proving no significant predictability.

Performing the F-test starts with identifying the observed F in the output report which is 20.854. This exceeds the critical value and successfully rejects the null hypothesis, supporting at least one of the variables is statistically significant and proves predictability of variation by the model for DEOM

Looking at the adjusted r-squared, the output report displays a moderately positive correlation sitting at 0.56. In terms of predictability, this isn't very strong and indicates only 56% of the variation can be predicted by the model.

In the analysis of the standard error, the table displays a normal distribution of residual data based on the residual analysis. This proves that the model is well fitted to the actual data.