

Data files:

data1.csv : Use this data file if the last digit of your roll number is 5 to 9.

data2.csv: Use this data file if the last digit of your roll number is 0 to 4.

Use R to perform multiple linear regression to find the linear relation between the independent variables (predictors) and the dependent variable.

In data1.csv: D is the dependent variable

In data2.csv: S is the dependent variable

Important: Based on the statistical test results for the regression, you may have to drop one or more predictors or intercept from your linear model. You should report only the final regression model.

You have to submit two files:

a) Your R script. The name of this file should be roll_number.R.

b) Report written in a MS Word file. The name of this file should be roll_number.docx.

The report should have the following:

a) Name and Roll Number

b) Name of the data file used

c) The equation of the fitted linear model in terms of the variable names (as given in the data file).

d) The adjusted R-squared value.

e) The p-values (t-test) for each of the coefficients.

f) The p-value from the F-test.

g) The confidence intervals for each parameter. The confidence interval should be written in the following form: the value of coefficient \pm deviation.

Do not copy-paste results from the R console.