**Practical 2**

Aim – Demo of Simple/Multiple Linear Regression

Theory –

1. Simple Linear Regression:

Simple linear regression is used to estimate the relationship between two quantitative variables. You can

use simple linear regression when you want to know:

• How strong the relationship is between two variables (e.g., the relationship between rainfall and

soil erosion).

• The value of the dependent variable at a certain value of the independent variable (e.g., the

amount of soil erosion at a certain level of rainfall).

Regression models describe the relationship between variables by fitting a line to the observed data.

Linear regression models use a straight line, while logistic and nonlinear regression models use a curved

line. Regression allows you to estimate how a dependent variable changes as the independent variable(s)

change.

For Eg:

You are a social researcher interested in the relationship between income and happiness. You survey 500people whose incomes range from 15k to 75k and ask them to rank their happiness on a scale from 1 to10.Your independent variable (income) and dependent variable (happiness) are both quantitative, so you cando a regression analysis to see if there is a linear relationship between them.

Code: 



