

## **Module 5: Assignment 12 - RSE & MRSE**

## **Problem Statement:**

You work in XYZ Corporation as a Machine Learning Engineer. After splitting the data into train and test sets, now the corporation wants you to analyze the multiple linear regression model.

## Tasks to be performed:

- 1. After splitting the data frame into train and test sets, build a simple linear model on top of the train set for the city\_temperature data frame.
  - a. For this model, take Country, Region, City, and AvgTemperature as the independent variable and Month as the dependent variable.
  - b. Check the Residual Standard Error and Multiple R-Squared Error.
- 2. After splitting the data frame into train and test sets, build a simple linear model on top of the train set for the Placement\_Data\_Full\_Class data frame.
  - a. For this model, take degree\_p, mba\_p, and status as the independent variable and etest\_p as dependent variable.
  - b. Check the Residual Standard Error and Multiple R-Squared Error.
- 3. After splitting the data frame into train and test sets, build a simple linear model on top of the train set for the Pharmacovigilance\_audit\_Data data frame.
  - a. For this model, take Issues, DrugId, and Gender as independent variable and Age as dependent variable.
  - b. Check the Residual Standard Error and Multiple R-Squared Error.