

## Module 5: Assignment 3 – Multiple Linear Regression

---

### 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 train the multiple linear regression models.

### 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.
  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.
  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.
-