

## Module 5: Assignment 4 – Adjusted R Squared & F Statistics

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### 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 logistic 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 Adjusted R squared value and F statistics.
  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 Adjusted R squared value and F statistics.
  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 Adjusted R squared value and F statistics
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