

## Module 6: Assignment 3 – Significance of Features

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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 train the multiple logistic regression model.

### Tasks to be performed:

1. After splitting the data frame into train and test sets, build a multiple logistic model on top of the train set for the city\_temperature data frame.
    - a. For this model, take AvgTemperature, Day, Month, and Year as the independent variable and Region as the dependent variable.
    - b. Check the significance of the features that you have selected for the model.
  2. After splitting the data frame into train and test sets, build a multiple logistic model on top of the train set for the Customer\_Churn data frame.
    - a. For this model, take tenure, Streaming TV, Monthly Charges, and Total Charges as the independent variable and Churn as dependent variable.
    - b. Check the significance of the features that you have selected for the model.
  3. After splitting the data frame into train and test sets, build a multiple logistic model on top of the train set for the Pharmacovigilance\_audit\_Data data frame.
    - a. For this model, take Gender, Age, and Patient\_Id as independent variable and DrugId as dependent variable.
    - b. Check the significance of the features that you have selected for the model.
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