## CASE STUDY :

## INSURANCE CLAIM PREDICTION:

- 1. Read the Data Definition and Ensure to give proper Interpretation
- 2. Import the Following Libraries
- 3. Set Options for the following Output
- 4. Data Analysis and Preparations:
  - Understand the Dataset
  - Data Dimensions
  - Check for Data Types
  - Change the Incorrect Data Types if it's necessary
  - Sanity check for the Incorrect Data Types
  - Summary Statistics for (both Numerical and Categorical Columns)
  - Missing Value Treatment (showcase in Coding and Visualization Choose Appropriate plotting)
  - Sanity Check for Missing Values (Showcase in Coding and Visualization Choose Appropriate Plotting)
  - IF missing Values are exists, Deal with Appropriate Treatment.
  - Calculate Pearson's Correlation for Both Categorical and Continuous Data.
  - Set of Analysing Categorical Columns with Appropriate Plotting, with inferences
  - Analyse the Relationship B/w Target and Categorical Variables.
- 5. Feature with loaded Information about the Dataset, The insights should be meaningful.
- 6. Discover Outliers, and add up necessary extraction insights with proper treatment.
- 7. Check for Multicollinearity with Adaptive Method as user knows.
- 8. Prepare the Data:
  - Check the Normality
  - Plot a Histogram and also perform the Jarque-Bera Test (It is a test to check the Normality of the Target variable, consider with p-value)
  - If the data is not normally distributed, use appropriate way to get near normally distributed data.
  - Recheck the normality by plotting Histogram, and Perform Jarque-Bera Test
  - Perform One way Anova
- 9. Encoding for Categorical Data
- 10. Scaling for Ensured Method
- 11. Split the Dataset for further analysis
- 12. Impute the Linear Regression Analysis (OLS Summary)

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