**Lab Assign - 09 - Logistic Regression Model – 2**

1. Read a dataset of your choice suitable for logistic regression.
2. Identify the response variable (dichotomous) and predictors (2 or 3).
3. Use relevant R / Python packages for model building and model evaluation.
4. Display dataset summary statistics.
5. Create training & testing datasets by splitting the available dataset in ratio 80:20.
6. Build suitable logistic model using training dataset for predicting the response.
7. Display model summary and derive equation of estimated probability of response variable.
8. Predict values of response variable using the model built with the testing dataset.
9. Plot the graph 🡪 Any one predictor Vs predicted probability of response variable.
10. Display the odds ratio for each of the predictors and write its interpretation.
11. Transform the predicted response obtained in step 8 based on the threshold level=0.7 (means if p >0.7, 1, 0 )
12. Build confusion matrix of actual Vs predicted responses and evaluate model accuracy.
13. Draw the ROC-AUC Curve for your model and comment on effectiveness of the model.

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