# Final Assignment

Task: Make a model for Logistic Regression without using the inbuilt libraries (like SciKitLearn, pytorch etc). Make a Logistic Regression class of your own which has the following functions:

1. Split: This function splits the dataset into train(80%) and test(20%)
2. Fit: This function fits the dataset to train the model
3. GD: This function carries out the gradient descent algorithm by calculating

derivatives and updating the weights and biases.

1. Predict: Outputs the prediction.

NOTE: This class should be such that it should work for any given data frame i.e., it should not be hard-coded. Make a model only for binary classification and use Pandas, NumPy, Matplotlib and seaborn libraries only.

Now try fitting the following dataset and predicting the output:

[Diabetes dataset](https://drive.google.com/file/d/1CZnueo457hwLvk35pzJKATfJe5U6XuL4/view?usp=sharing)