**House Loan Data Analysis**

For safe and secure lending experience, it's important to analyze the past data. In this project, you have to build a deep learning model to predict the chance of default for future loans using the historical data. As you will see, this dataset is highly imbalanced and includes a lot of features that make this problem more challenging.

**Objective:** Create a model that predicts whether or not an applicant will be able to repay a loan using historical data.

<https://vision-explorer.allenai.org/text_to_image_generation>

**Domain:** Finance

**Analysis to be done:** Perform data preprocessing and build a deep learning prediction model.

**Steps to be done:**

⦁ Load the dataset that is given to you

⦁ Check for null values in the dataset

⦁ Print percentage of default to payer of the dataset for the TARGET column

⦁ Balance the dataset if the data is imbalanced

⦁ Plot the balanced data or imbalanced data

⦁ Encode the columns that is required for the model

⦁ Calculate Sensitivity as a metrice

⦁ Calculate area under receiver operating characteristics curve

You can download the datasets from here - <https://www.dropbox.com/s/smt43gz12eijbo6/loan_data%20%281%29.csv?dl=0>