**Business Problem:** Our business problem is to find the revolving credit balance using the independent variables like loan amount, interest rate, terms for credit etc. In doing so we could estimate interest to levy on the customers.

**Data Cleansing:** Our Data has 36 columns and 887379 rows. Most of the data types of our variables are float type and few of them are object and integer type. We have converted all the variables to unique format i.e. float type. We also had missing values in our data set, so we used mean imputation for filling the missing values. Finally before applying the model for better understating the data used correlation function and found that there is no colinearity problem with all the independent variables.

**Exploratory Analysis:** We have performed univariant analysis for better understating of data by using different plots like Histogram, Bar plot, Violin plot, box plot etc.

**Feature Engineering**: Finally we have scaled the data for getting better results.

**Challenges:** We have underwent different models for getting better RMSE and reduce the under fitting problem.

**Model Deployment:** We have used 21 columns and all the records. We defined ” Y” as revolving credit and all other variables as” X “.We have tried Multilinear Regression, Neural Network , XGBooster and Random Forest and got better RMSE values for Random Forest. We split the data set in the ratio of 20% test data and train data as 80% and got RMSE train as ”15751.557” RMSE test as“18070.909” and RMSE

on entire Data as”16126.145”.

**Observation:** our revolving credit is highly influenced by loan amount, interest rate and number of terms.