

# Business Problem

The bank want to build a model such that bank can give a variable rate of intrest to some people. This model will be implemented on bulk but bank done a proof of concept and collected data for some people. Now using this data we have to build a machine learning model which can help us to predict the Interest Rate.

Now we are having data for many variables such as Amount Requested,Amount Funded By Investors,Interest Rate,Loan Length,Loan Purpose,Debt To Income Ratio,Home Ownership,Monthly Income,Open CREDIT Lines,Revolving CREDIT Balance,Inquiries in the Last 6 Months,Employment Length.

Now we have to use this information to make prediction on what should be the Interest Rate

The task now is to predict such a loan rate given the data.

Have you ever thought you get a different interest rate than your friend when you borrow personal loan.

## **Solution Approach:**

As we need to Interest Rate, which is continuous in nature, Linear Regression can be used for prediction