# CREDIT EDA ASSIGNMENT

KONA BINDU HARSHITHA

#### **Problem Statement**

- When the company receives a loan application, the company has to decide for loan approval based on the applicant's profile. Two types of risks are associated with the bank's decision:
- If the applicant is likely to repay the loan, then not approving the loan results in a loss of business to the company
- If the applicant is not likely to repay the loan, i.e. he/she is likely to default, then approving the loan may lead to a financial loss for the company.
- This case study aims to identify patterns which indicate if a client has difficulty paying their instalments which may be useful while taking decisions to approve or reject the loan.

# Analysis Approach

- Import Libraries
- Read Data
- Check for missing values and handle missing values
- Check for outliers
- Univariate Analysis
- Bivariate Analysis
- Correlation between attributes

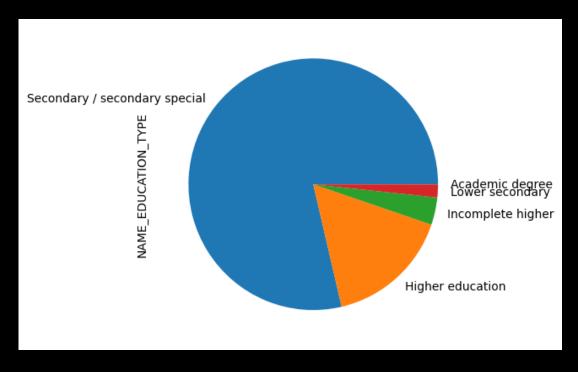


# DATA ANALYSIS



#### **Education of Defaulters**

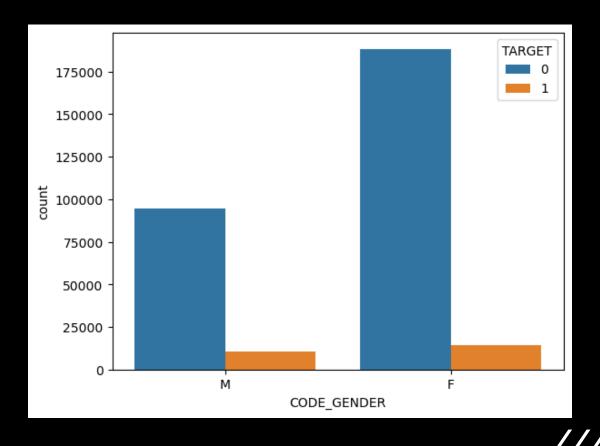
Majority of the defaulters have secondary education





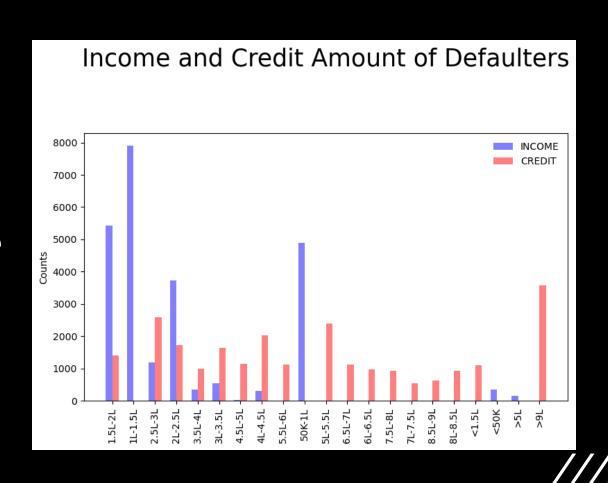
#### Gender

• More loans are given to Female. If proportions are compared among the loans given to Males more number of them are defaulters in comparison to female.

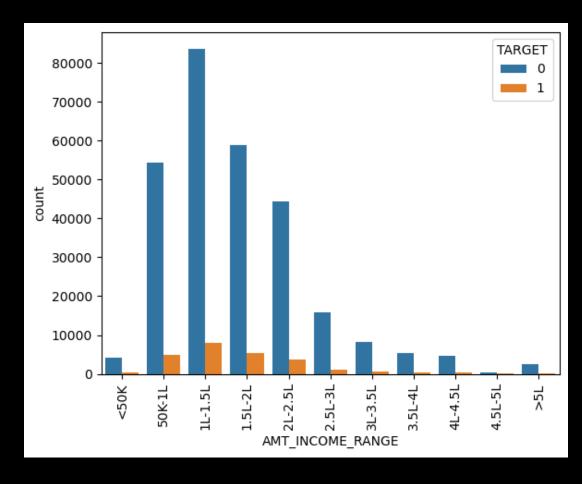


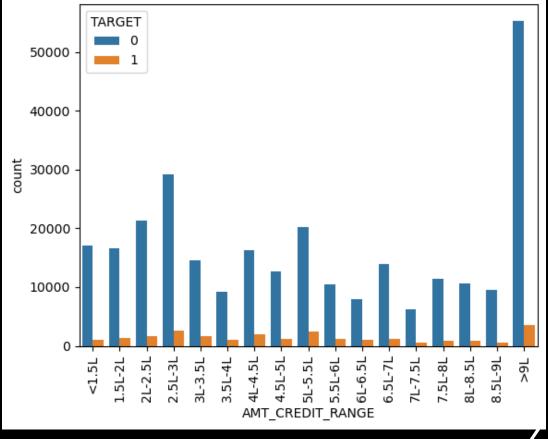
#### Income and Credit Amount of Defaulters

- From the chart it is observed that major chunk of defaulters income lies below 2.5L.
- There are many defaulters if the credit amount is greater than
   9L.



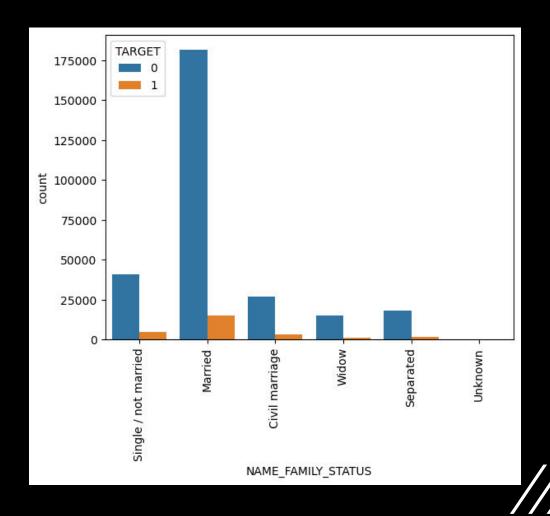
#### **Income and Credit**





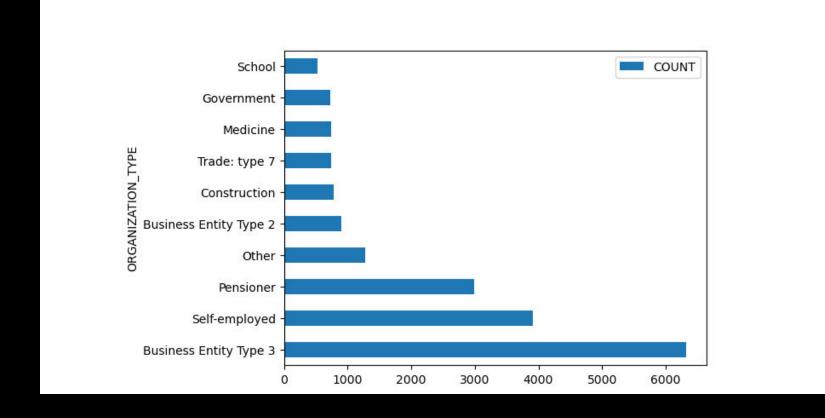
## Distribution of Family Status

 Loans are mostly taken by Married people and obviously a little chunk of them are defaulters.



# Top 10 Organization type of Clients with payment difficulties

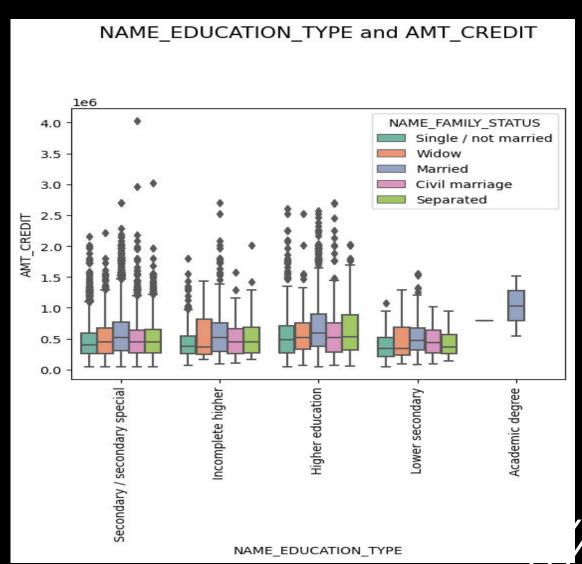




Distribution of Credit in terms of Education

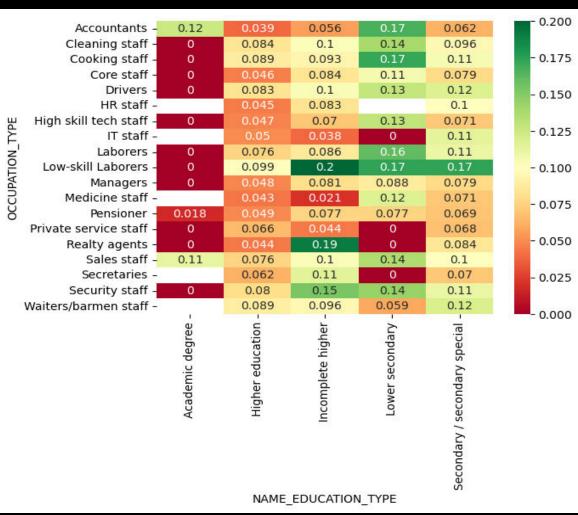
and Family status

 Married people with Academic degree has taken higher credit loans



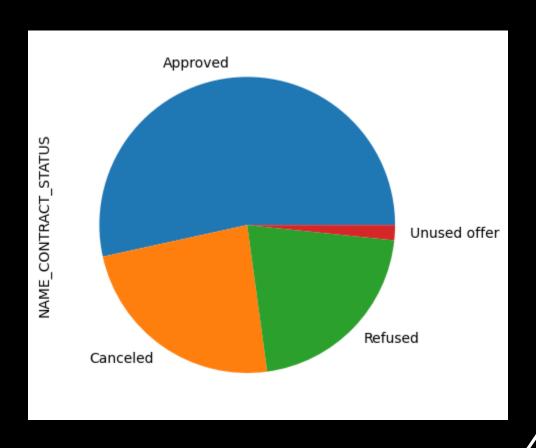
Correlation of Target with Occupation and Education

 Major defaulters are low skill laborers or with incomplete higher or lower secondary education.



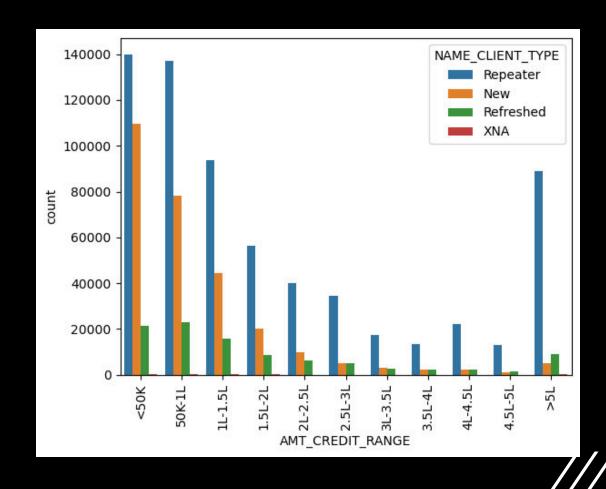
### Loan Status of Repeaters

• Very few clients have not used the offer.



# Approved Credit Amount across Client Types

- Major Repeaters have taken loan amount less than 2L.
- New Clients have taken loan less than 2L majorly.



#### Conclusion

- Banks should show interest on giving loans to Pensioners.
- Banks should consider married people for loans.
- It is risky to give loan to low skill laborers and with low education.
- Lower secondary and incomplete higher education clients are major defaulters.
- It is risky to give loan to low income people.
- More loans are given to Female compared to Males and number of defaulters in proportion of loans given to defaulters in male is greater.

# THANK

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