



# Credit EDA Assignment

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ANJALI N A

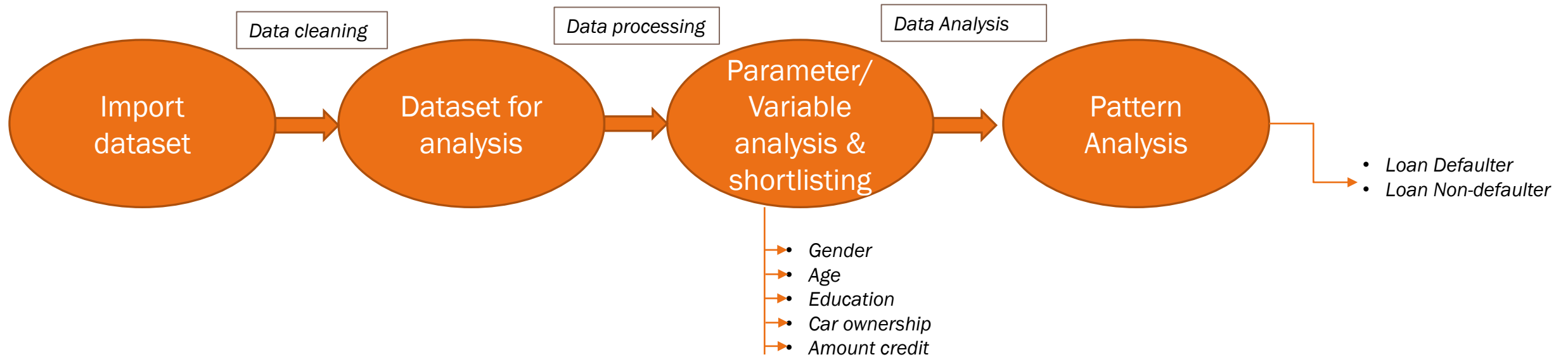
# Objective

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To analyse the banking data provided using explanatory data analysis approach and identify the driving factors of loan defaulter and clients who are most likely to repay the loan.

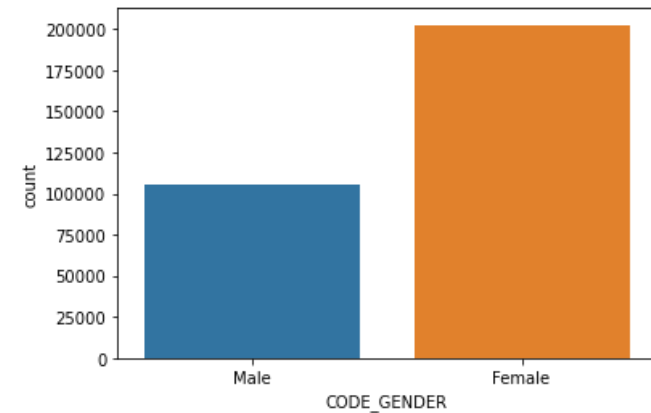
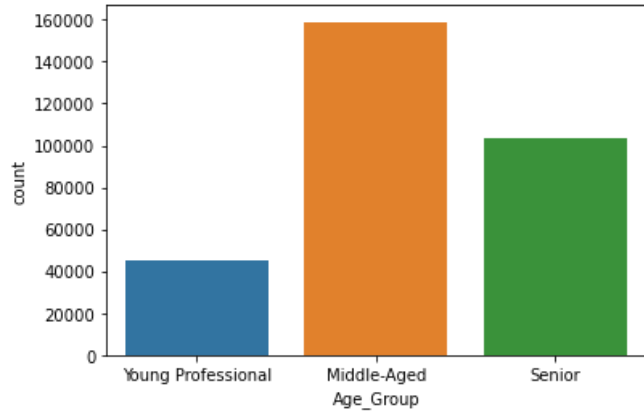
# Approach

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# Results & Discussions

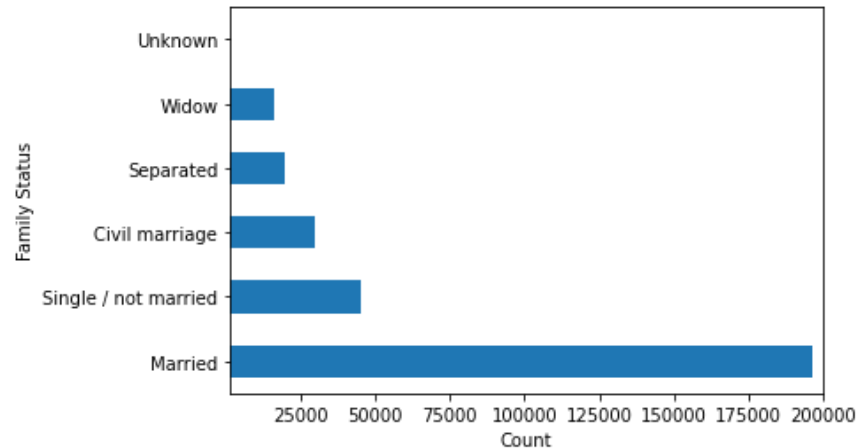
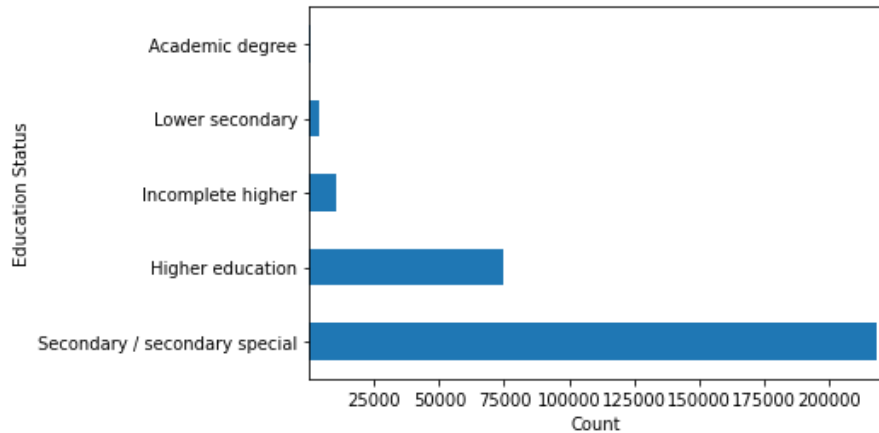
## Variable Analysis



- The plots shows the two variables considered for the univariate analysis for finding the loan defaulter.
- It is shown from the plots that the largest number of clients for loan belongs to middle aged group who are in the range from 30-50 age. This could be because it is this age group people who have the highest repaying capacity and investing more in the economy in their life time
- Another interesting factor to notice here is the majority of the clients belong to the female gender.

# Results & Discussions (contd..)

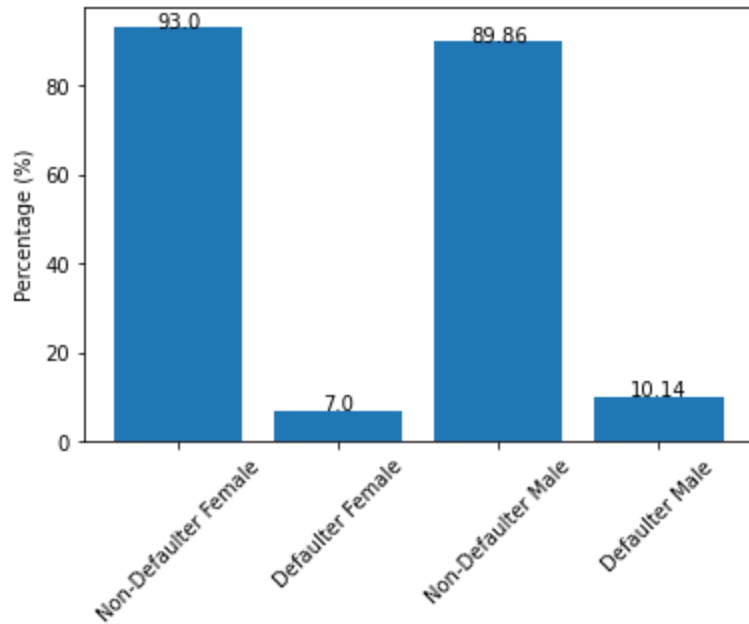
## Variable Analysis



- It is shown from the plots that the largest number of clients have completed Secondary/secondary special education.
- Also, from the Family Status we could infer that majority of the loan applicants are married. This could be because they have many family commitments and will apply for loans.

# Results & Discussions (contd..)

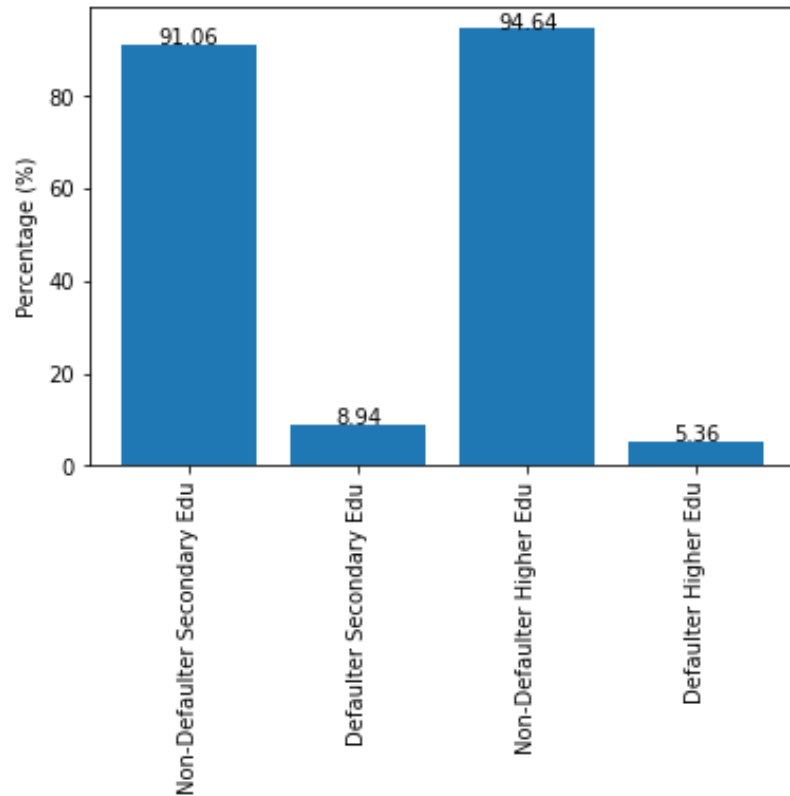
## Univariate Analysis results from 'application\_data.csv'



- From the univariate analysis results of the variable 'gender' in understanding the defaulter and non defaulter mapping, it is clear that a higher percentage of male tends to become a loan defaulter over female.

# Results & Discussions (contd..)

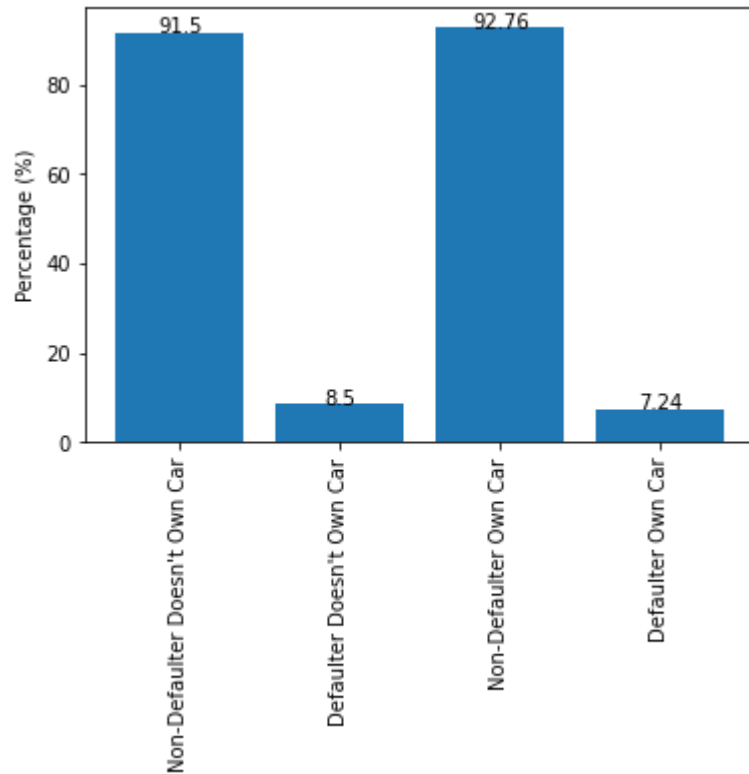
## Univariate Analysis results from 'application\_data.csv'



- The plot shows the pattern of defaulters and non defaulters with education as a variable.
- It is clear that if a potential client is of someone who has done higher education, then the chance of becoming a defaulter is less when compared to the other education levels like secondary school education. Only 5.36% of the total applicants turns out to be defaulter whereas close to 9% of the clients who have secondary education are defaulters.

# Results & Discussions (contd..)

## Univariate Analysis results from 'application\_data.csv'

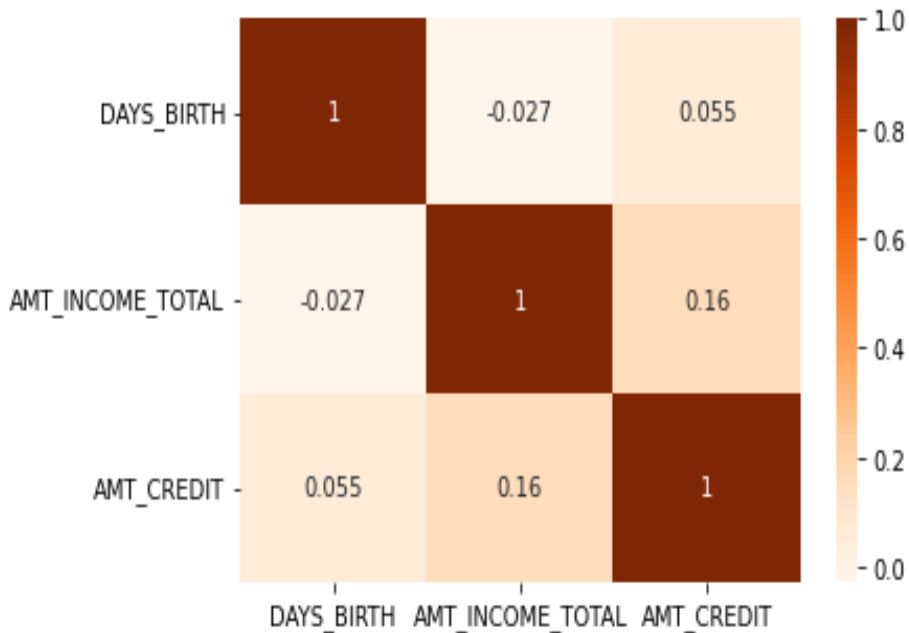


- The variable 'car ownership' when compared to the other variables is providing a predictable insights. The data shows that out of the people who own car, only 7.24% of people turns out to be a defaulter whereas 8.5% of the clients tends to become a defaulter for the group who doesn't own a car.
- The difference between the two category is not so substantial (barely 1.3%). Hence this variable cannot be used as an accurate driving factor to infer whether a potential client will be a defaulter or not.



# Results & Discussions (contd..)

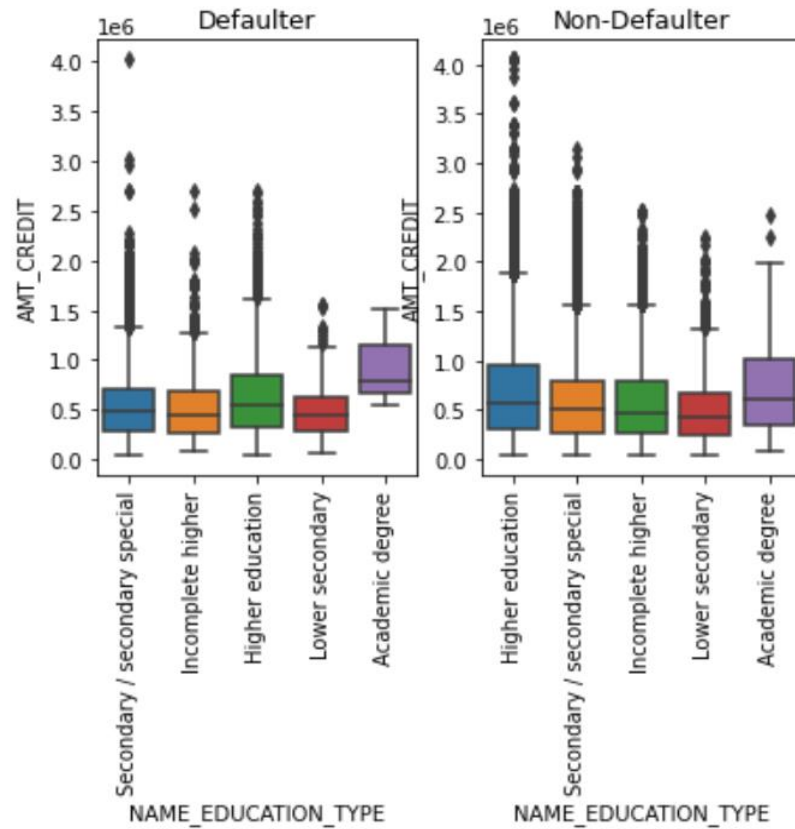
## Correlation Analysis Results



- The graph shows correlation relation with numerical variables like Age, Income and Credit Amount of the loan. From the correlation analysis we could infer that there is a negative relationship between Age & Income Total, which means when Age is increasing the income amount is reduced. This can be due to senior citizen after retirement, the income will be reduced or they will be unemployed.
- Another analysis which we could infer from this correlation is that Income total and Credit amount of loan have a positive relationship which means when income increases the credit amount also increases.

# Results & Discussions (contd..)

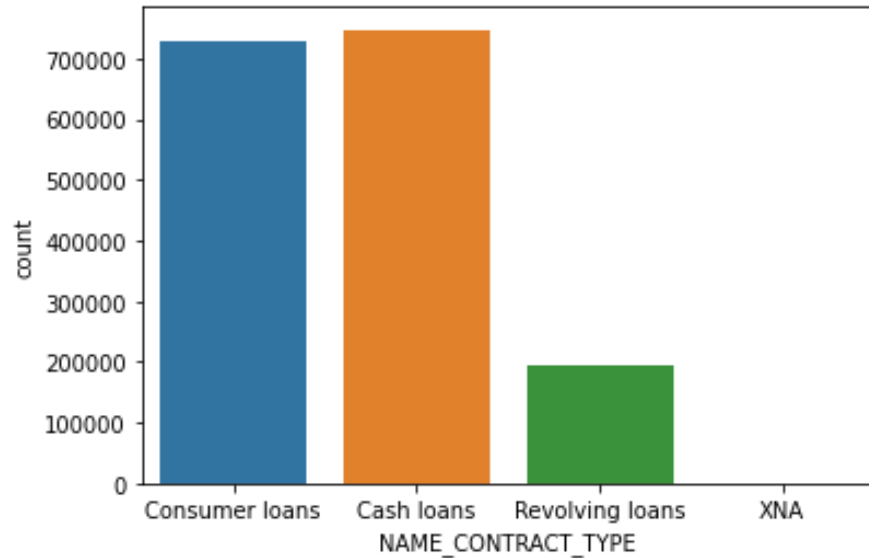
## Bivariate Analysis Results



The graph shows a bivariate analysis of credit amount and education status.

# Results & Discussions (contd..)

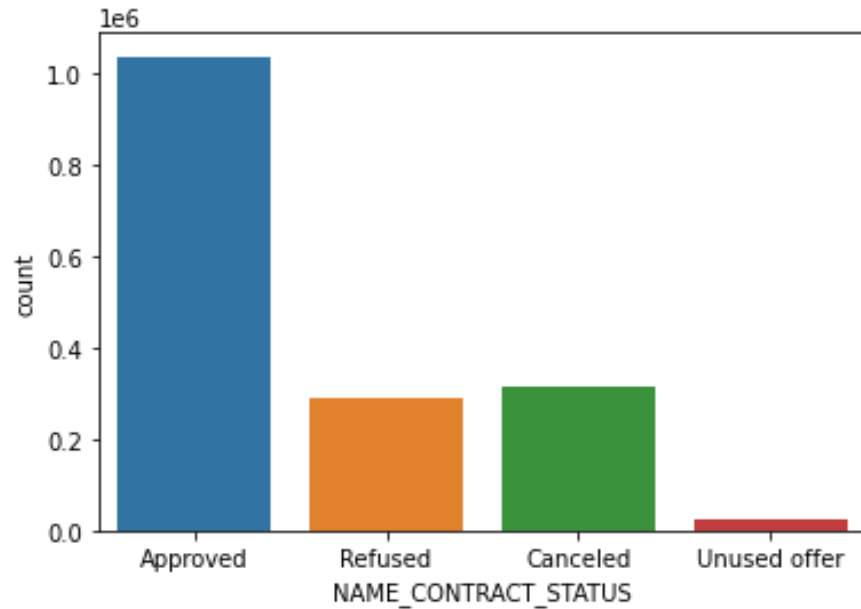
## Univariate Analysis Results of 'previous\_application.csv'



- The graph shows an univariate analysis of what type of loans are mostly applied by the clients from the previous application.
- From this we could infer that most of the loans are cash loans and consumer loans..

# Results & Discussions (contd..)

## Univariate Analysis Results of 'previous\_application.csv'



- The graph shows an univariate analysis of the loan status from the previous application and we could see that most of the loan applications were approved.

**Thank You !**