Lending Club Case Study

PRESENT BY

KARAN SINGH BISHT

SURENDRA BABU KUNKA

AGENDA

- PROBLEM STATEMENT
- DATA CLEANING
- ANALYSIS
- FINDINGS

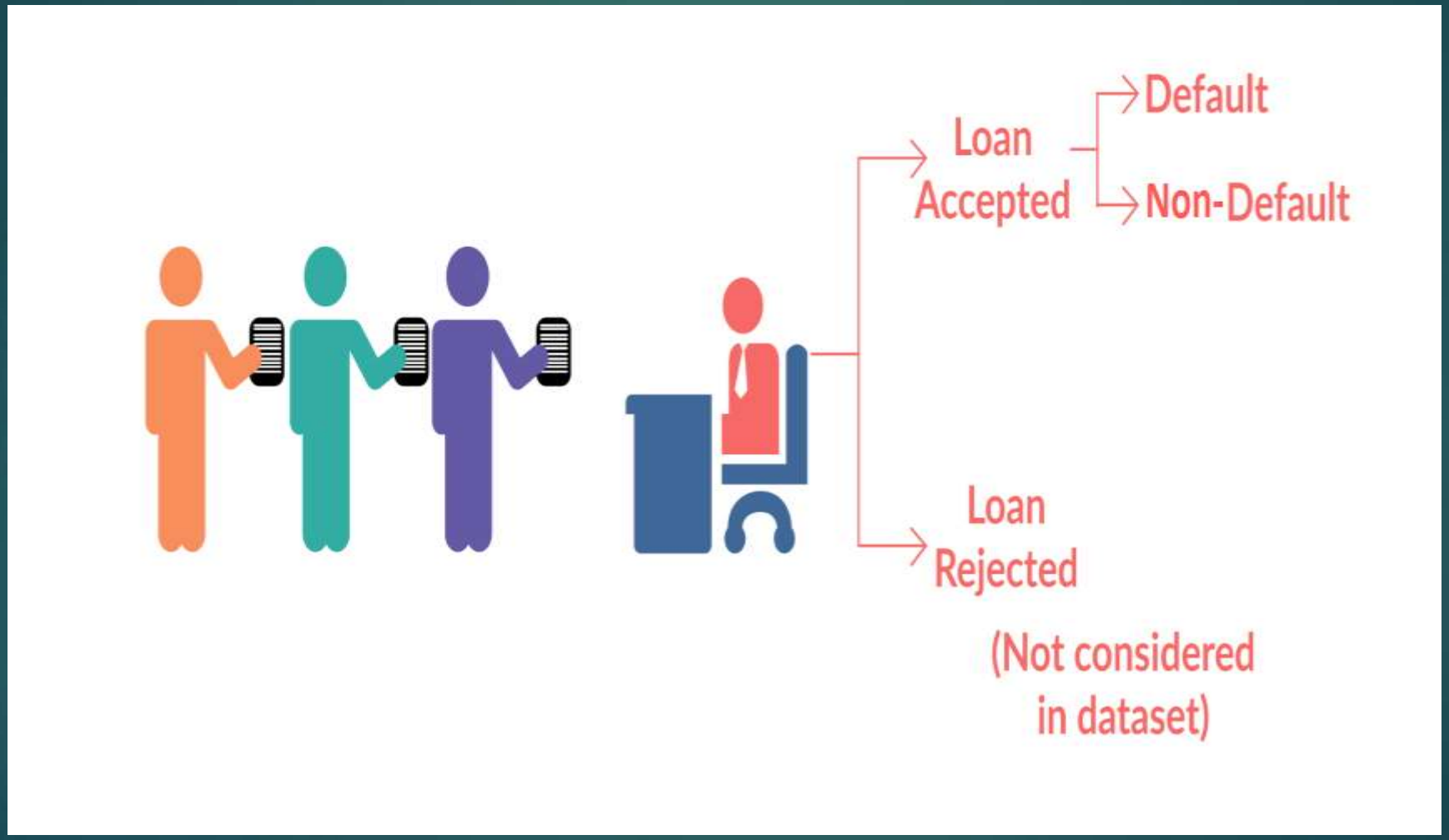
Problem statement

You work for a **consumer finance company** which specialises in lending various types of loans to urban customers. When the company receives a loan application, the company has to make a decision 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

Loan dataset



DATA CLEANING

- Need to fix rows and columns
- Drop columns which not required
- Need to fix missing values
- Derived Columns

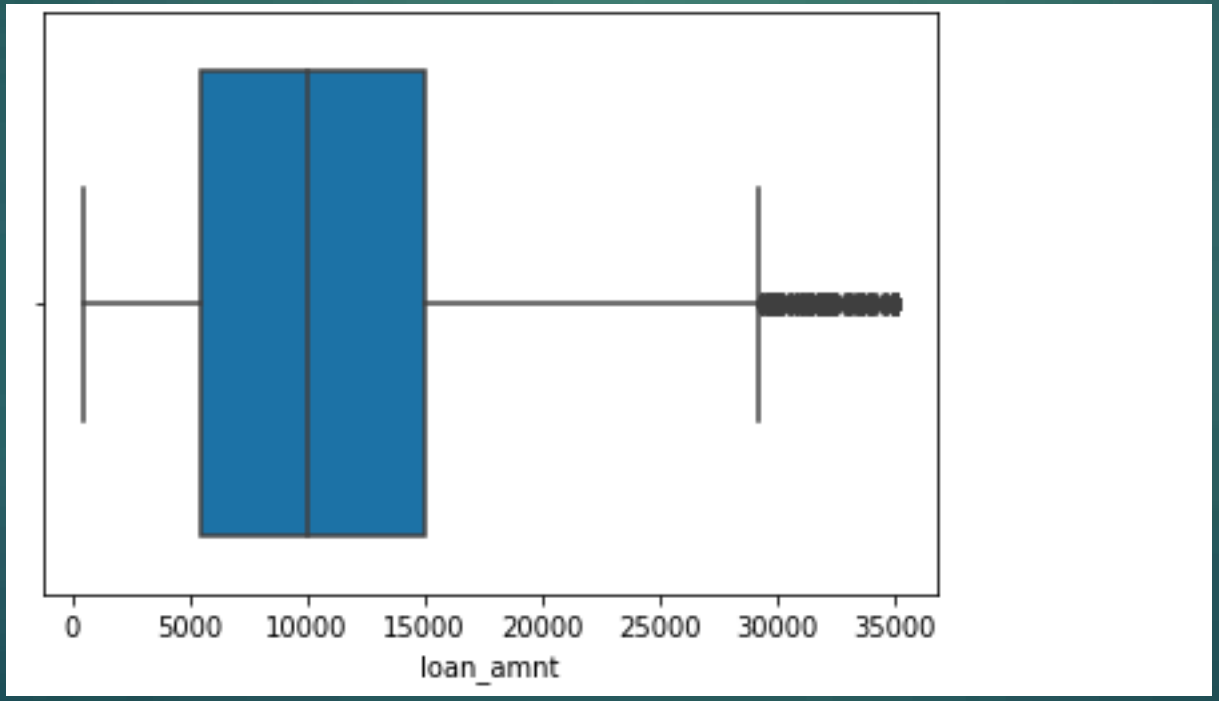
ANALYSIS

AFTER CLEANING THE DATA WE CAN USE THESE TWO ANALYSIS TO UNDERSTAND THE DATA

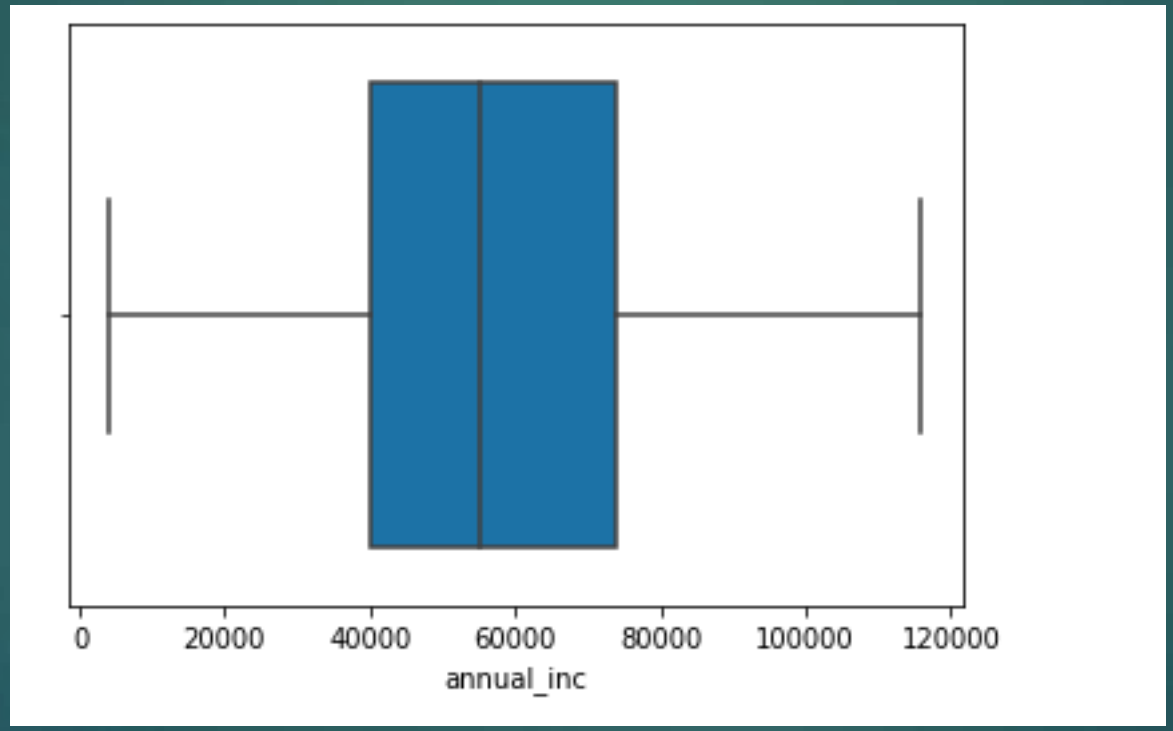
- 1. Univariate analysis
- 2. Bivariate analysis

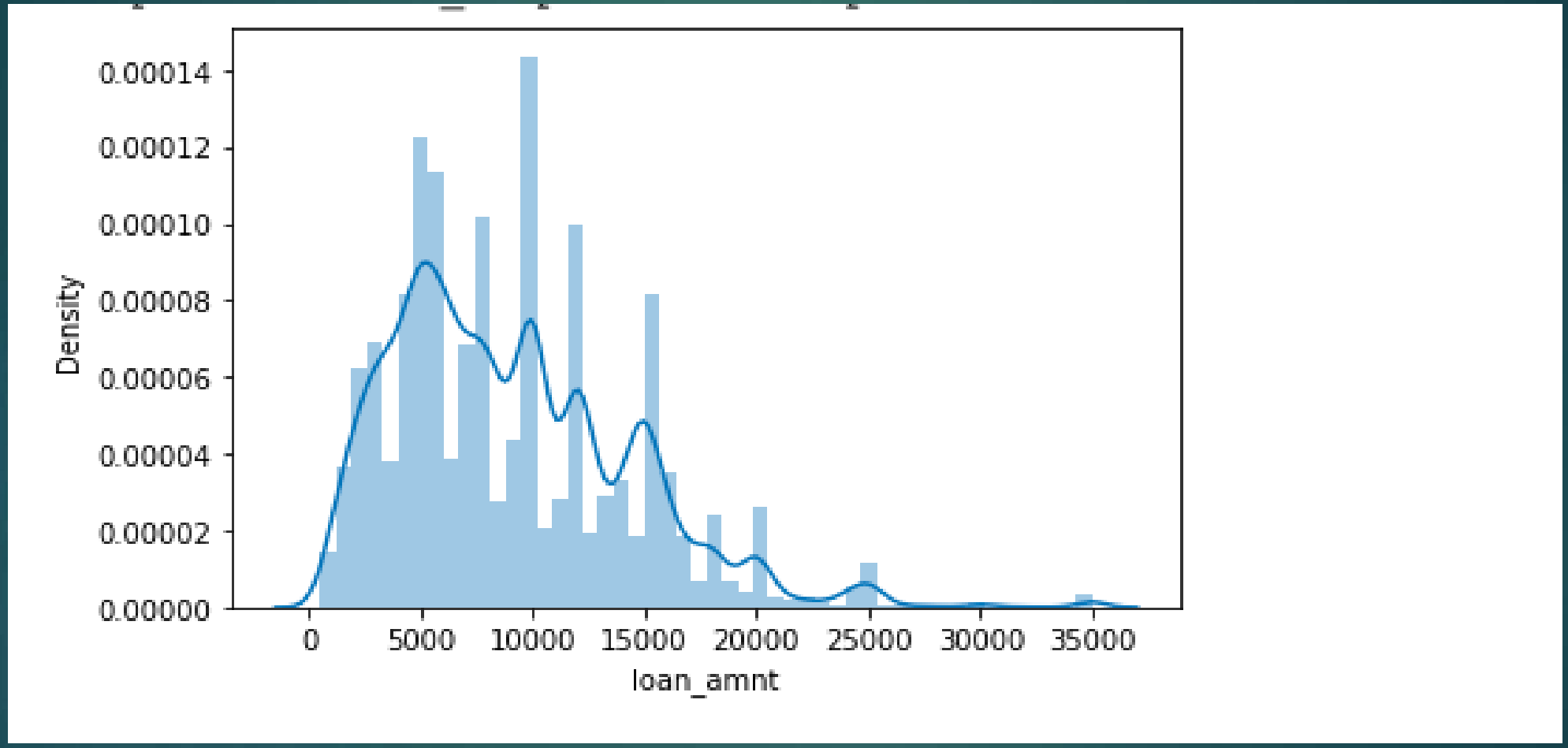
Univariate analysis

Mostly people taking loan between 5k to 15 k

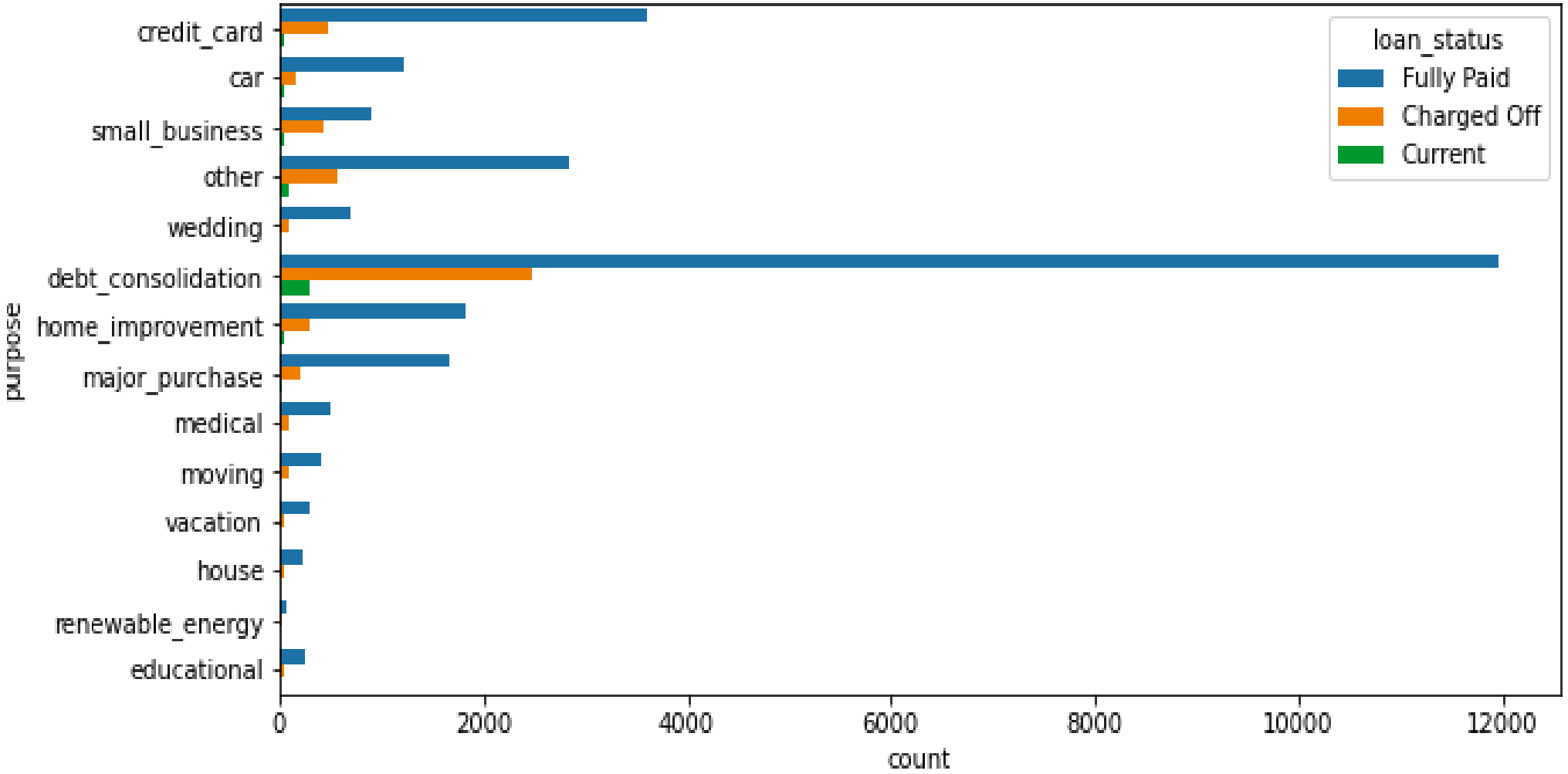


As per annual income people those are interested in Loan

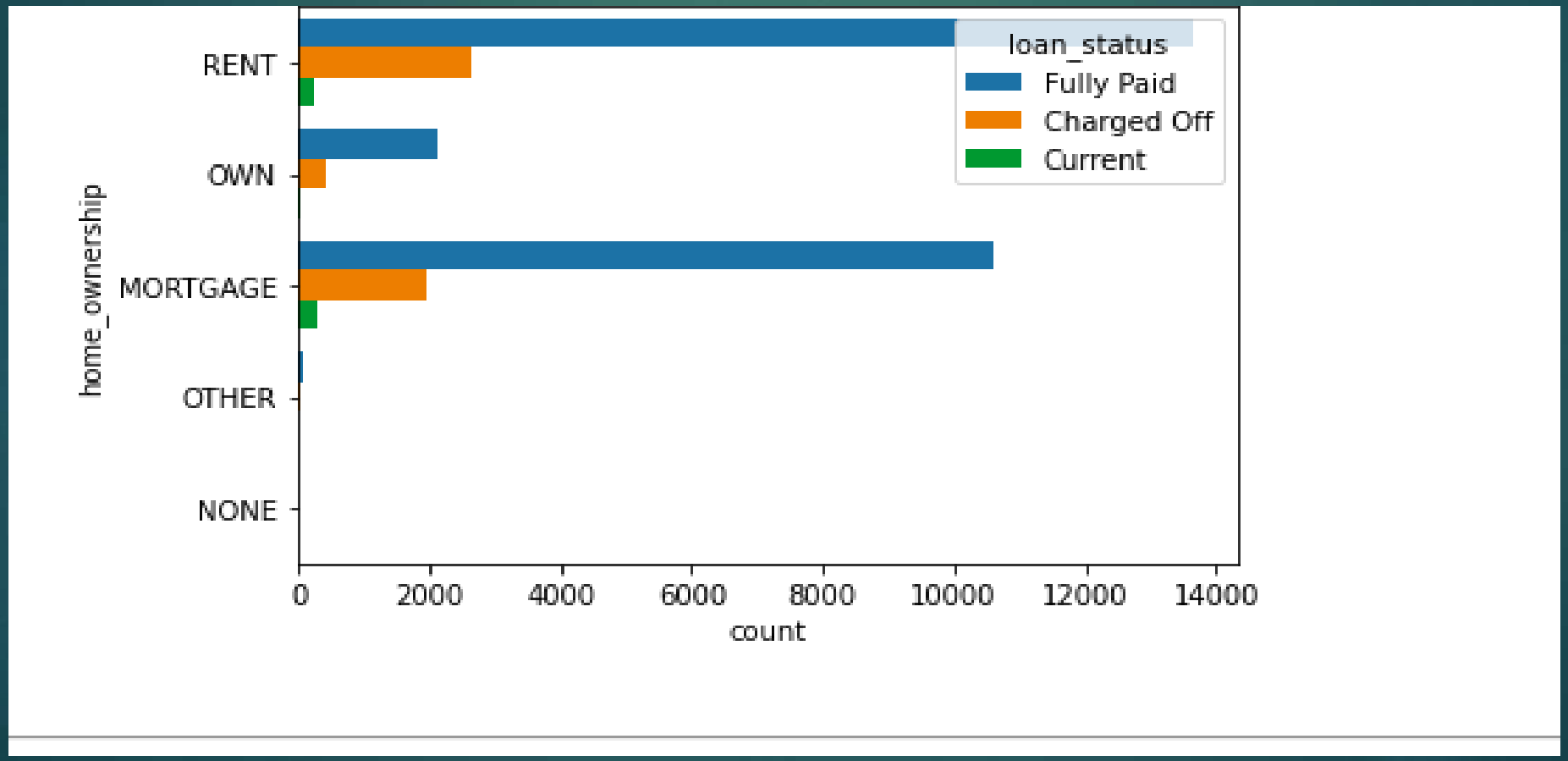



0.00014
0.00012
0.00010
0.00008
0.00006
0.00004
0.00002
0.00000
Density
0
5000
10000
15000
20000
25000
30000
35000
loan_amnt

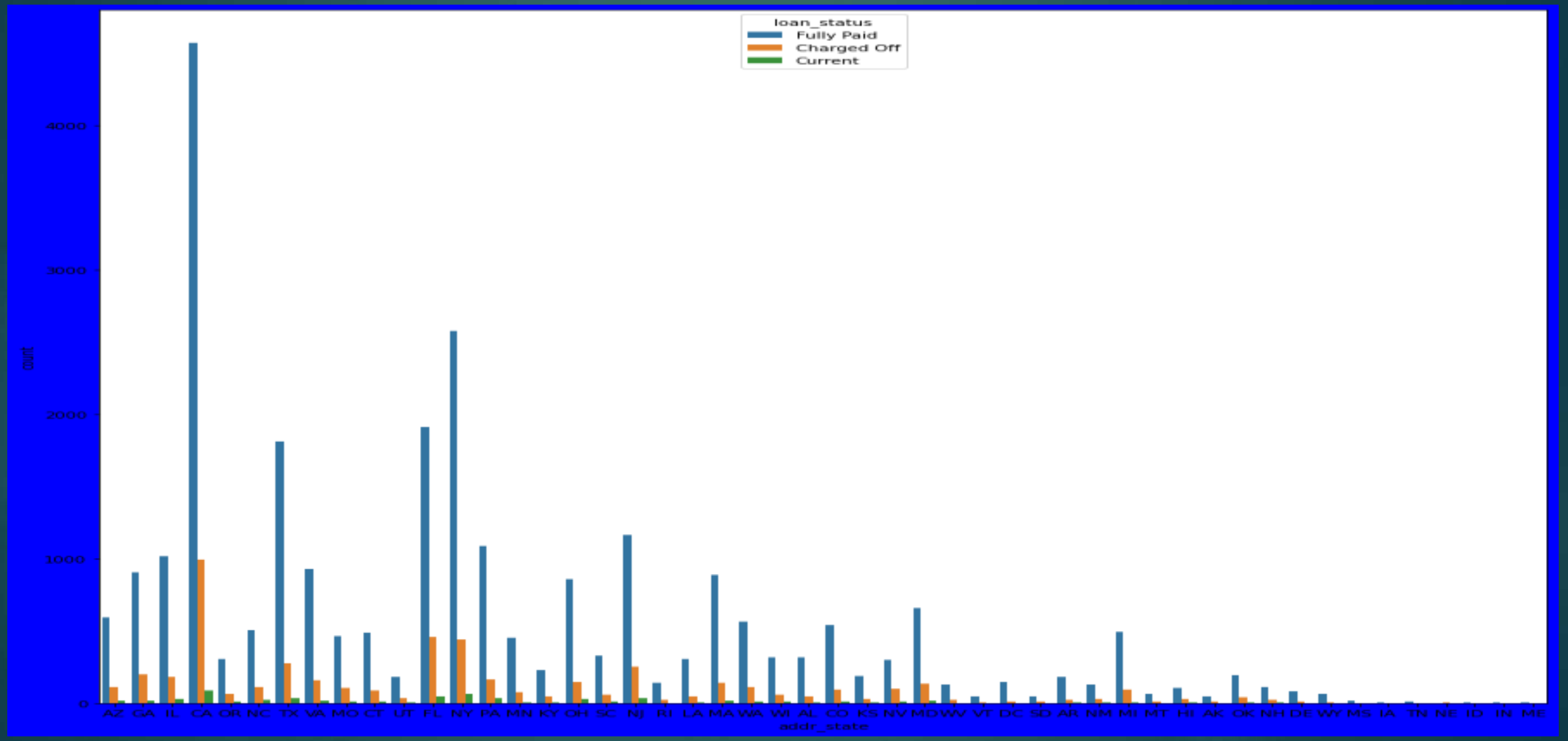
On the basis of purpose why people taking loan



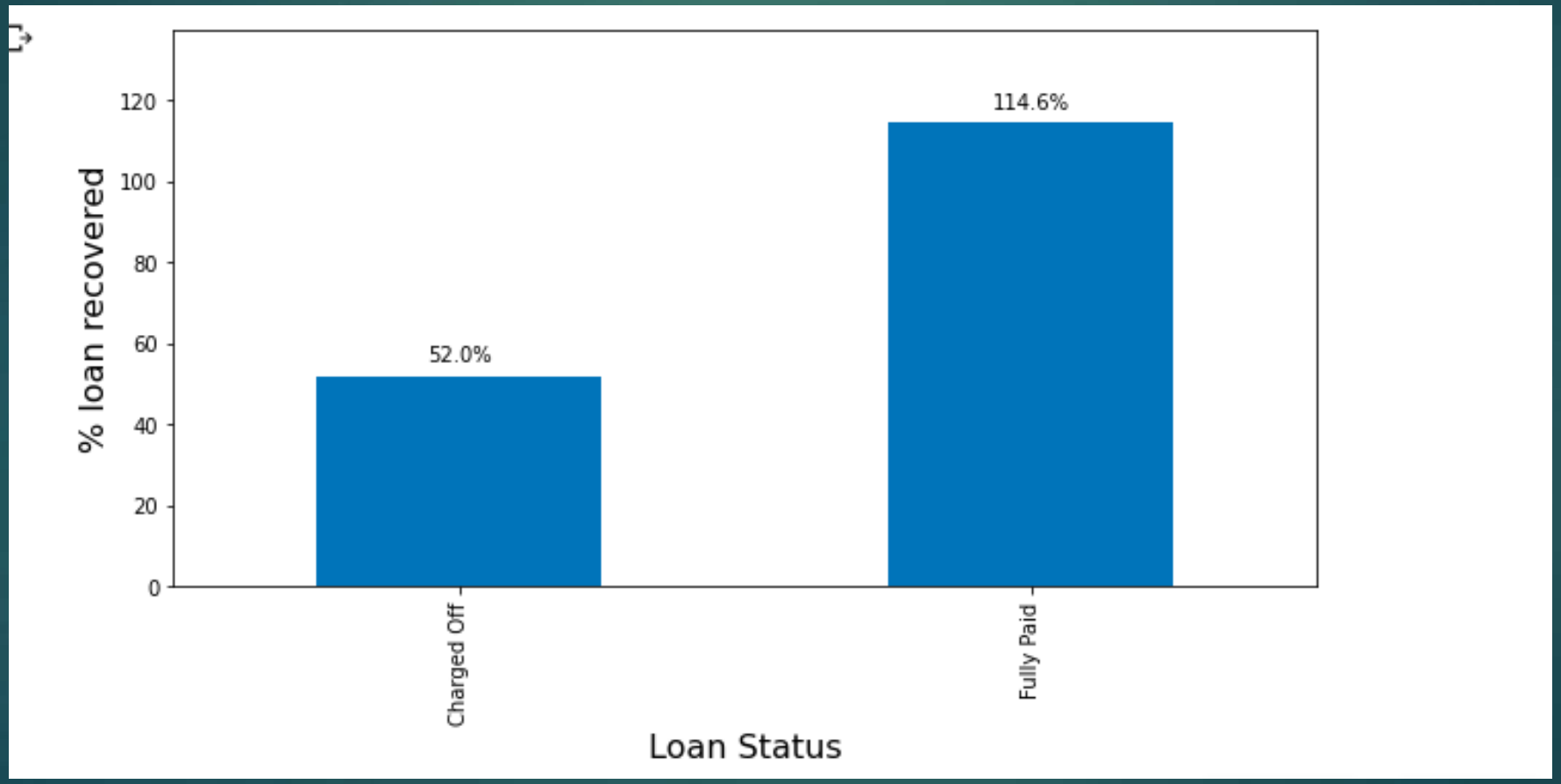
People those are living on rent are more interested on loan



Acording to state where people taking more loan

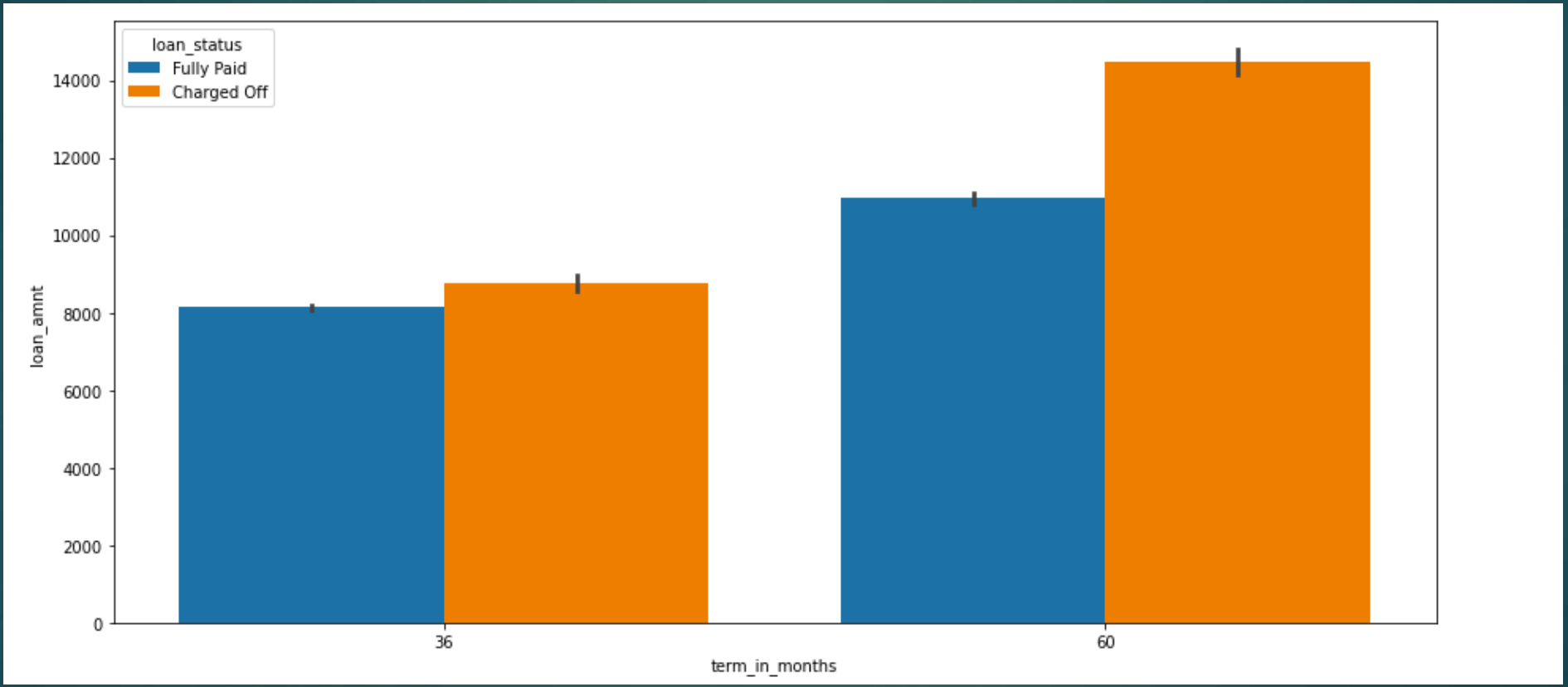


Observation: 52 % Loan amount is recovered from defaulters

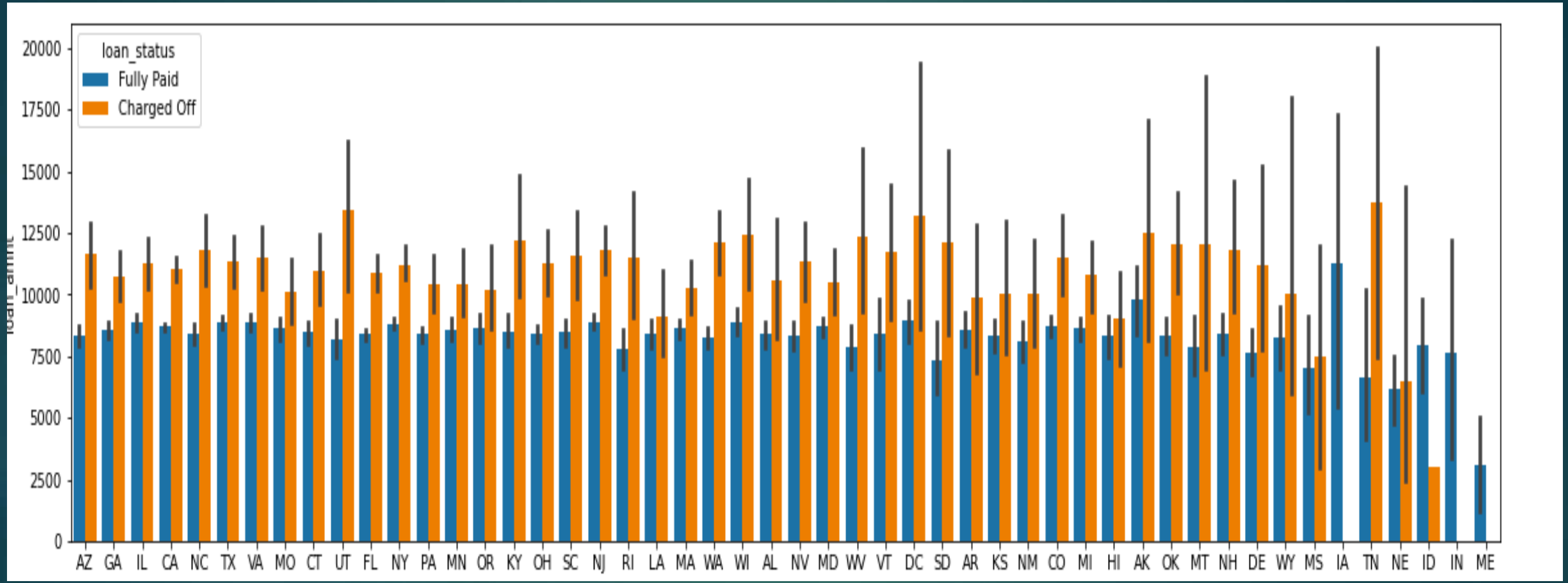


Bivariate analysis

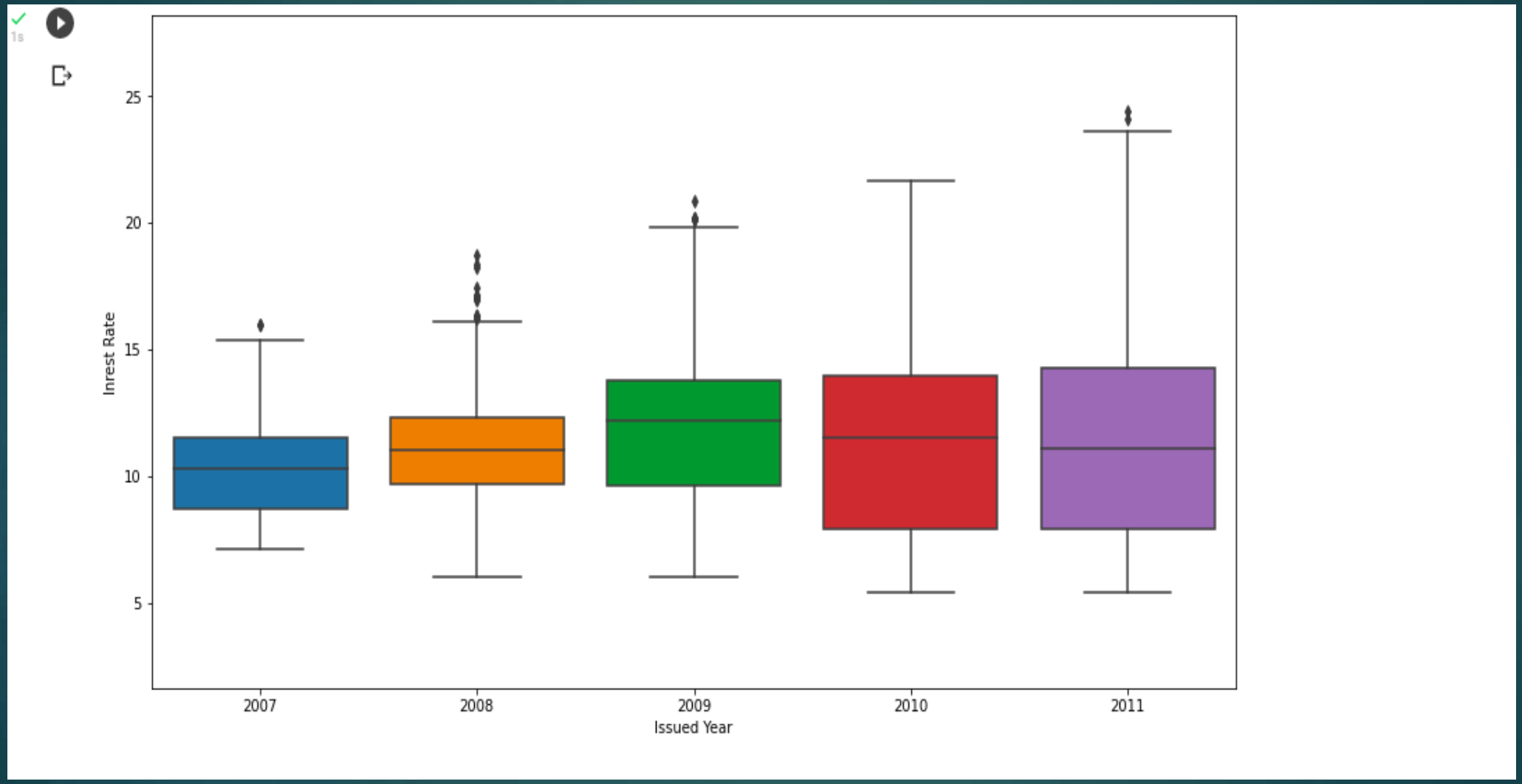
Observation:
As per the analysis, Higher the term and loan amount, higher Charged off's



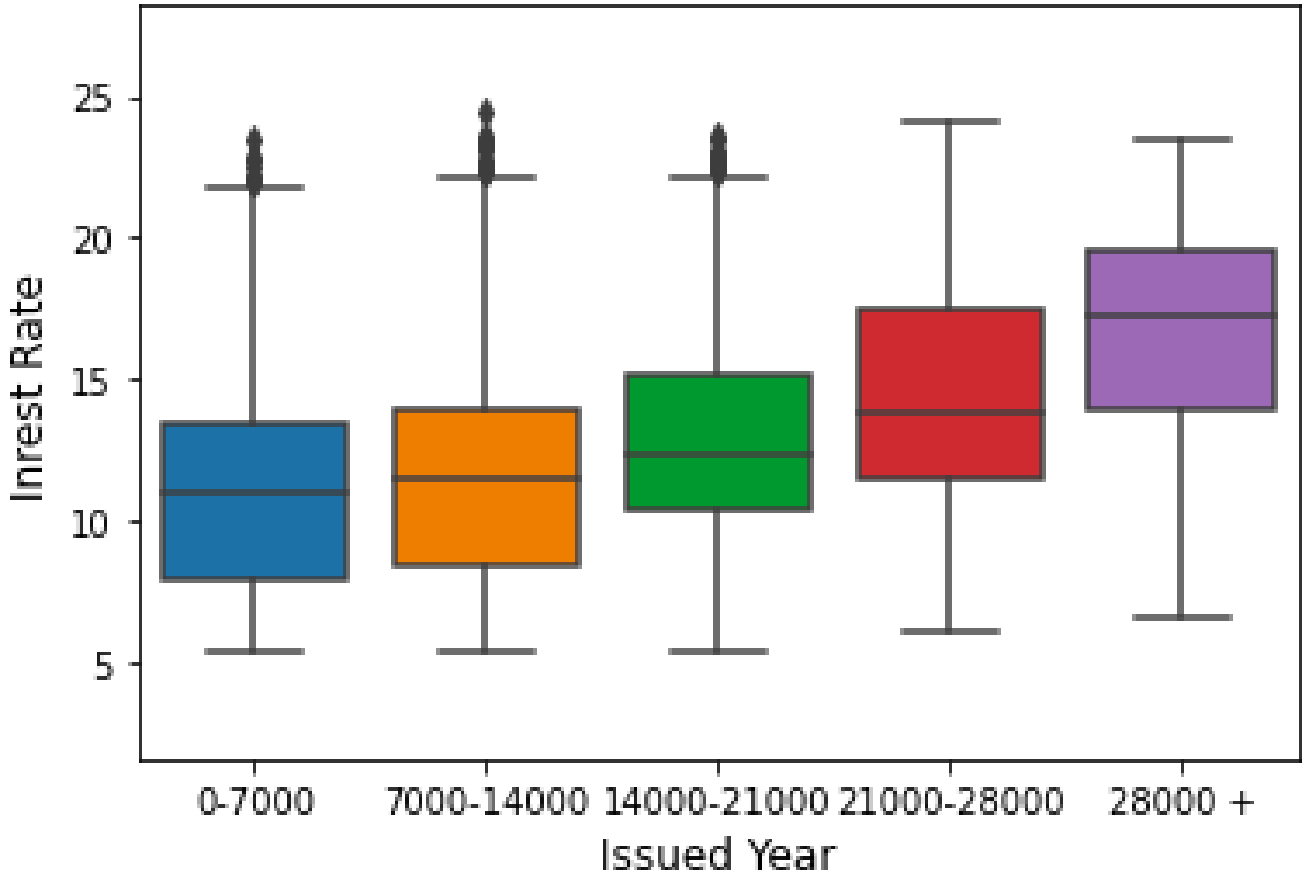
Observation : State Ak has Higher loan amount that is charged off



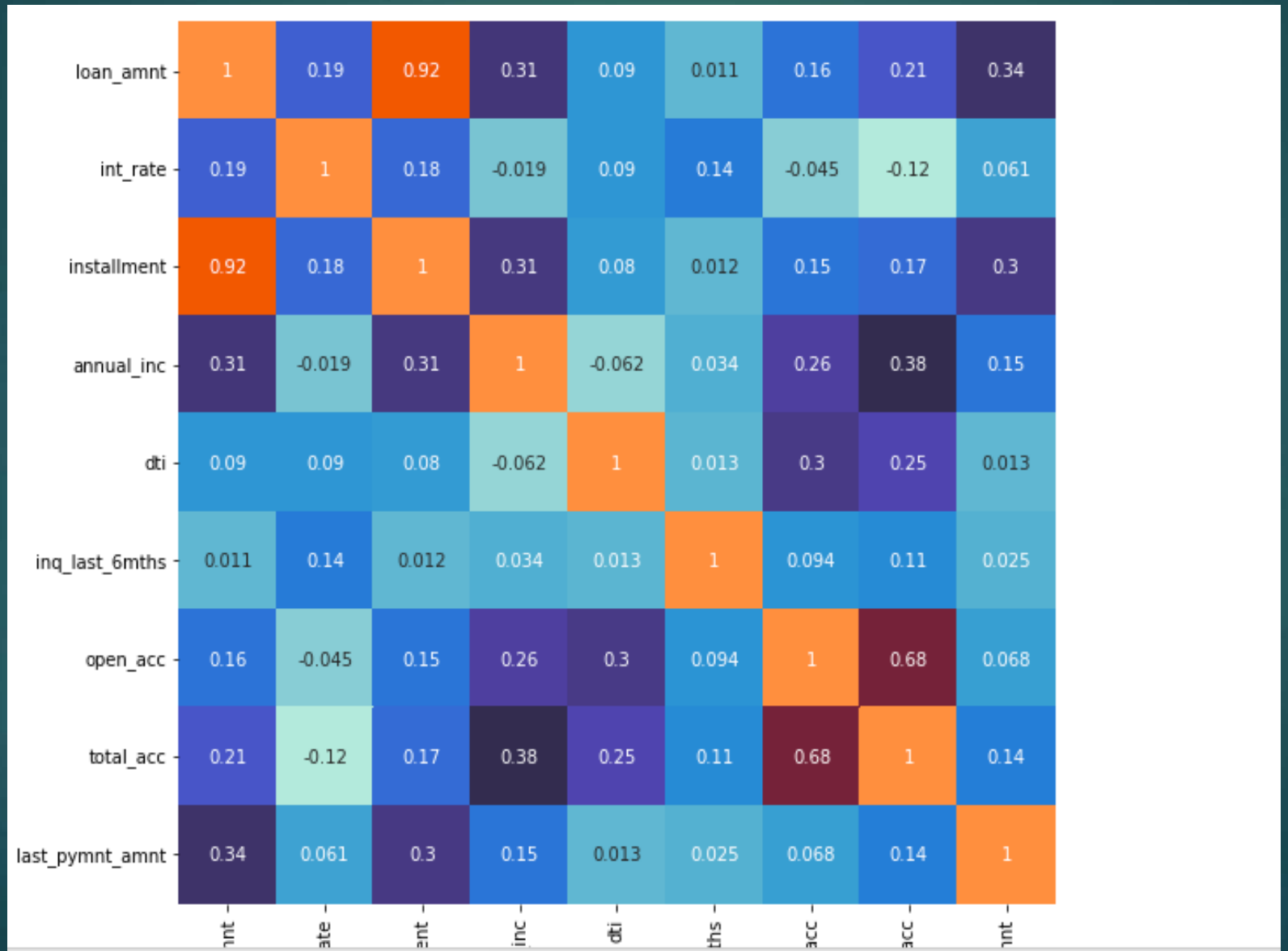
Observation: Interest rate is increased with each year



Observation: Intrest rate is also increased when Loan amount increase



Observation:
Loan amount and installment has high correlation
Annual Income and int_rate has negative correlation



Q&A

THANK YOU!