Lending Club Case Study

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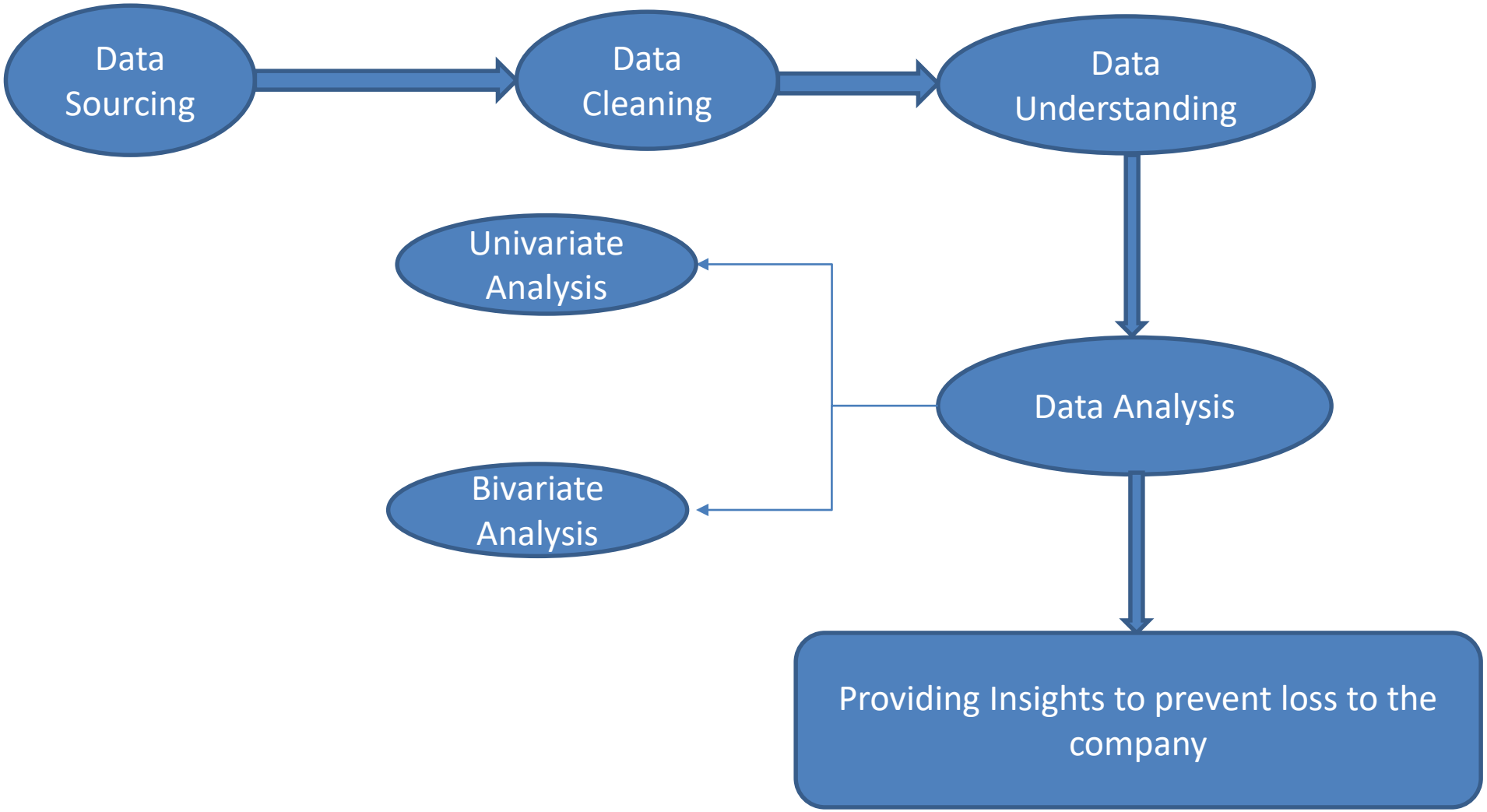
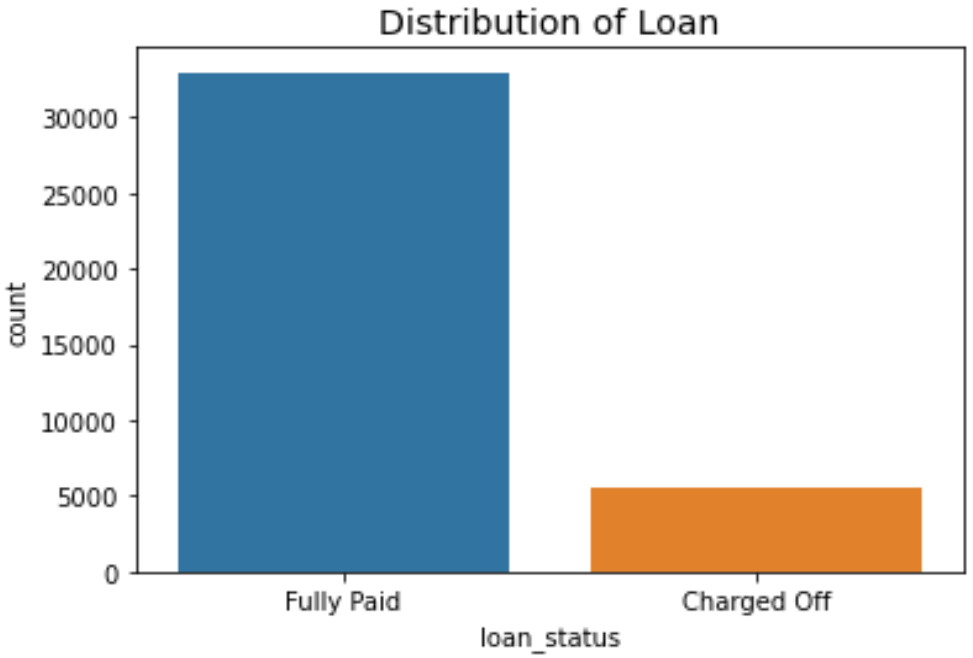
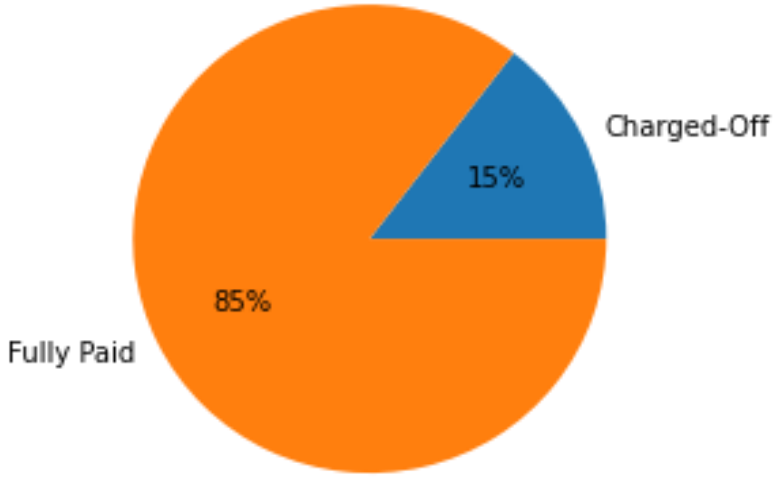
Abstract

- Lending club is place where **online loan approvals** will take places that provides different kinds of loans that includes personal, Business and so on.
- The Main Objective of this analysis is to **find the Defaulters** and understand the **driving factors** (or driver variables) behind loan default, i.e. the variables which are strong indicators of default
- This Analysis should help to take a decision whether to **provide loan or not** for new application and assisting to **prevent losses**


Data Sourcing
Data Cleaning
Data Understanding
Univariate Analysis
Data Analysis
Bivariate Analysis
Providing Insights to prevent loss to the company

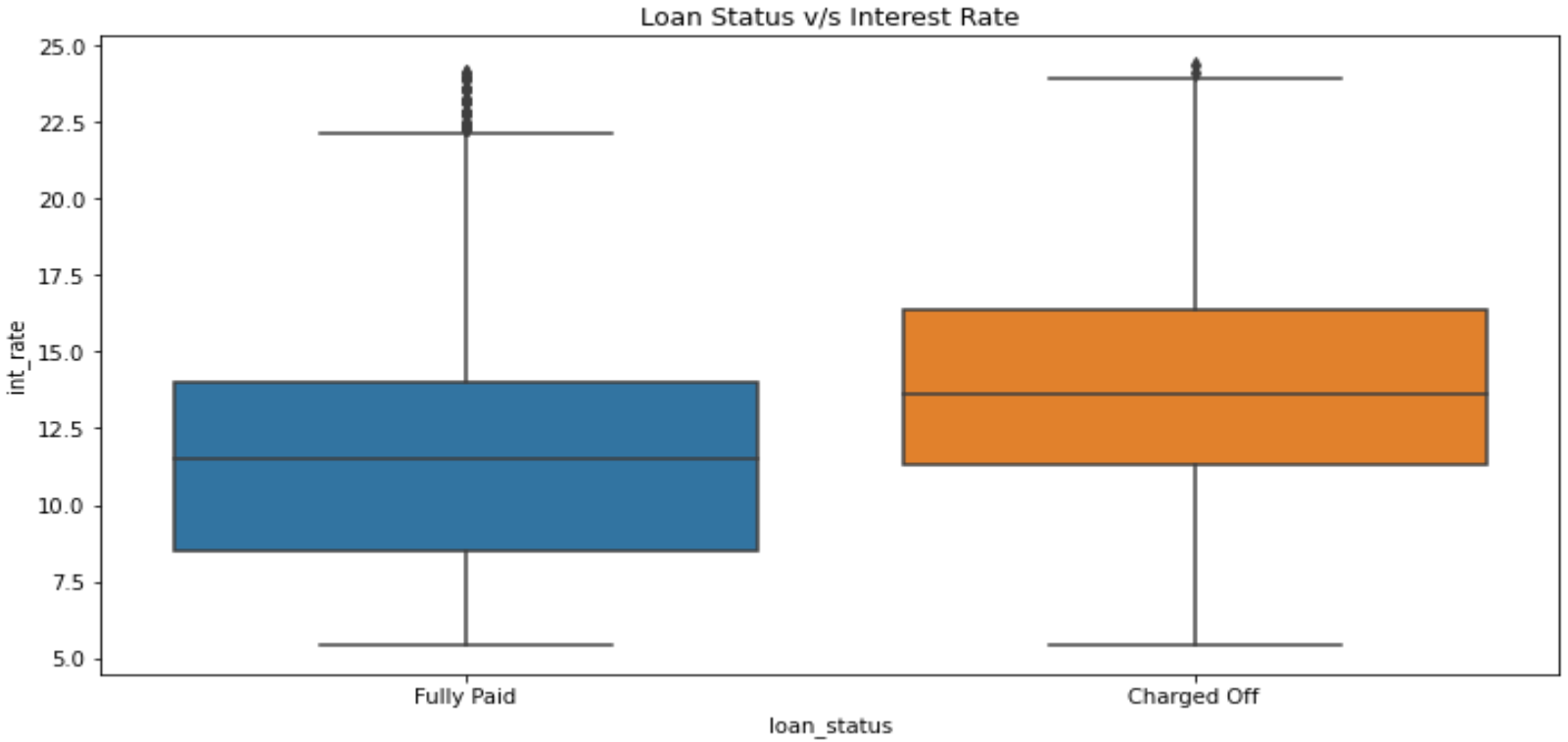
Analysis





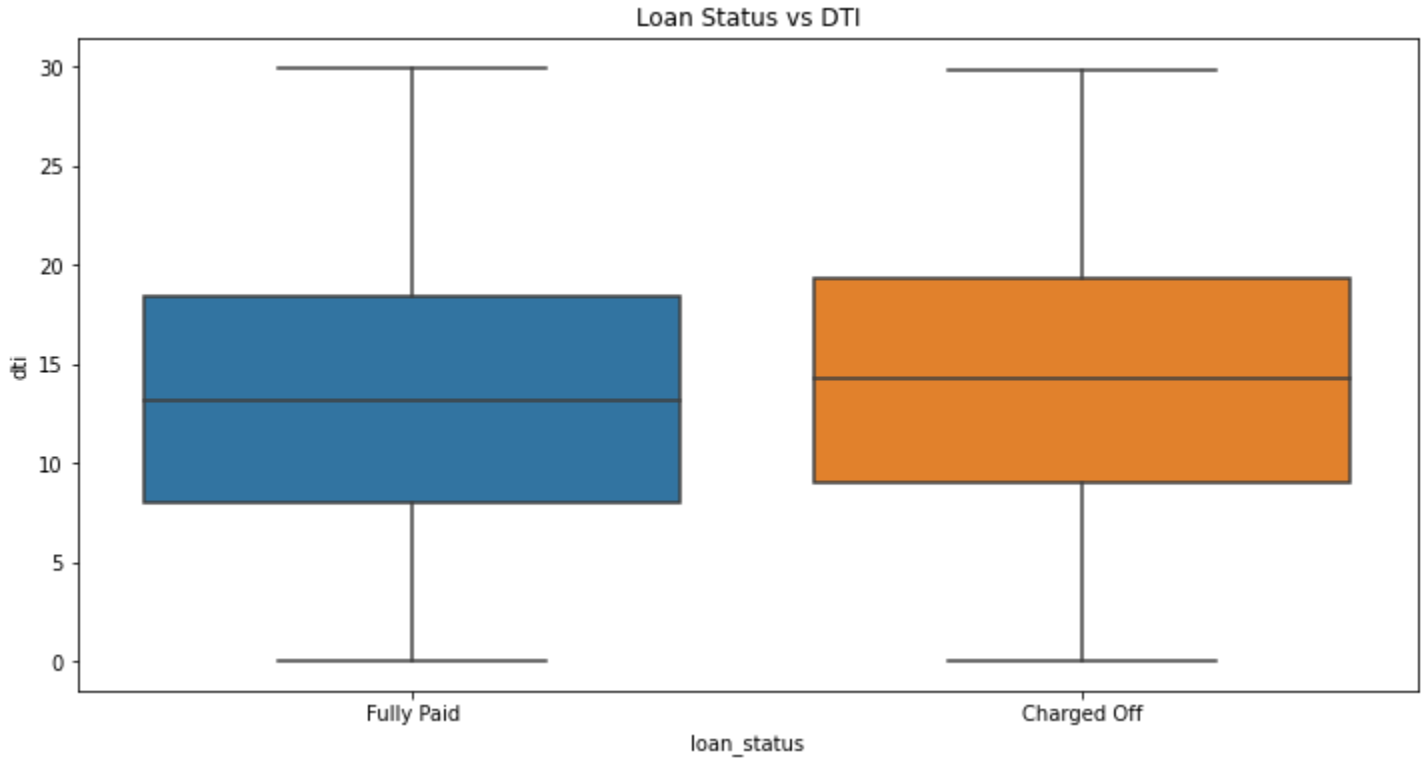
- There are 3 status Fully Paid, Charged off (Defaulters area), Current. Out of three Current loan status we don’t need to find the defaulters it is not helpful. So we removed them
- The charged off borrowers are around 15% and fully paid is around 85% in the given data set.

Analysis



- Borrowers having high interest rate are likely to default more

Analysis



- Borrowers with high dti are likely to default more

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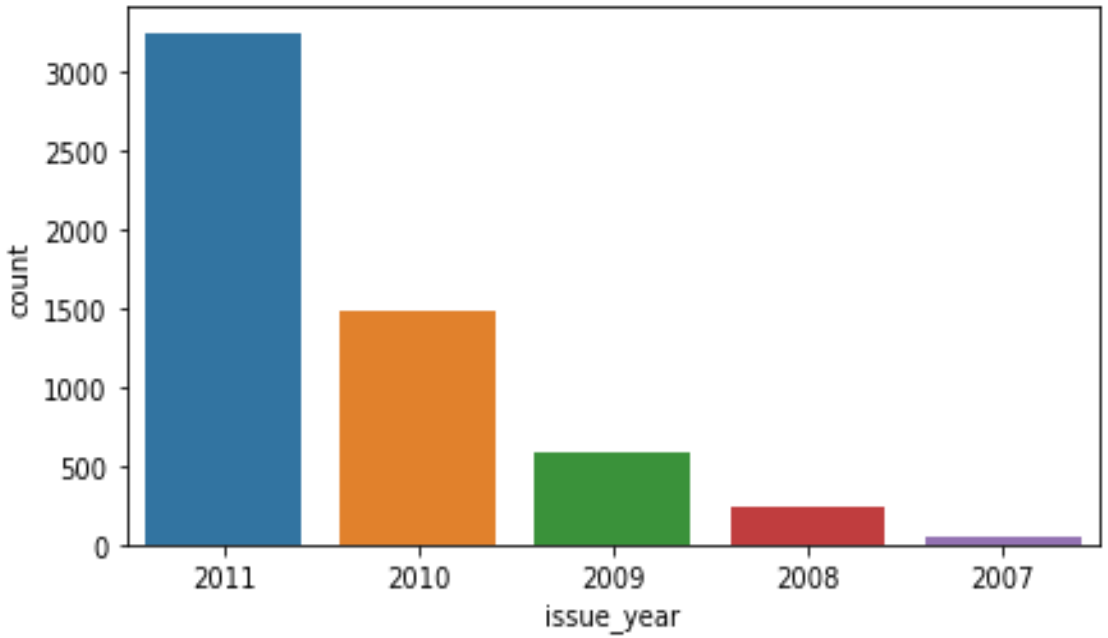
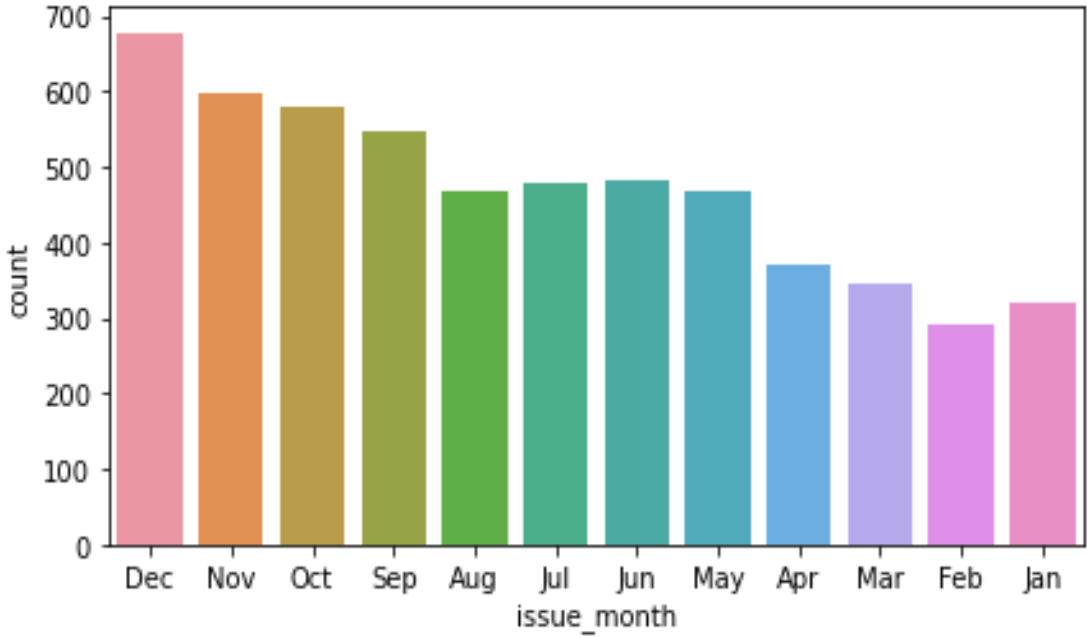
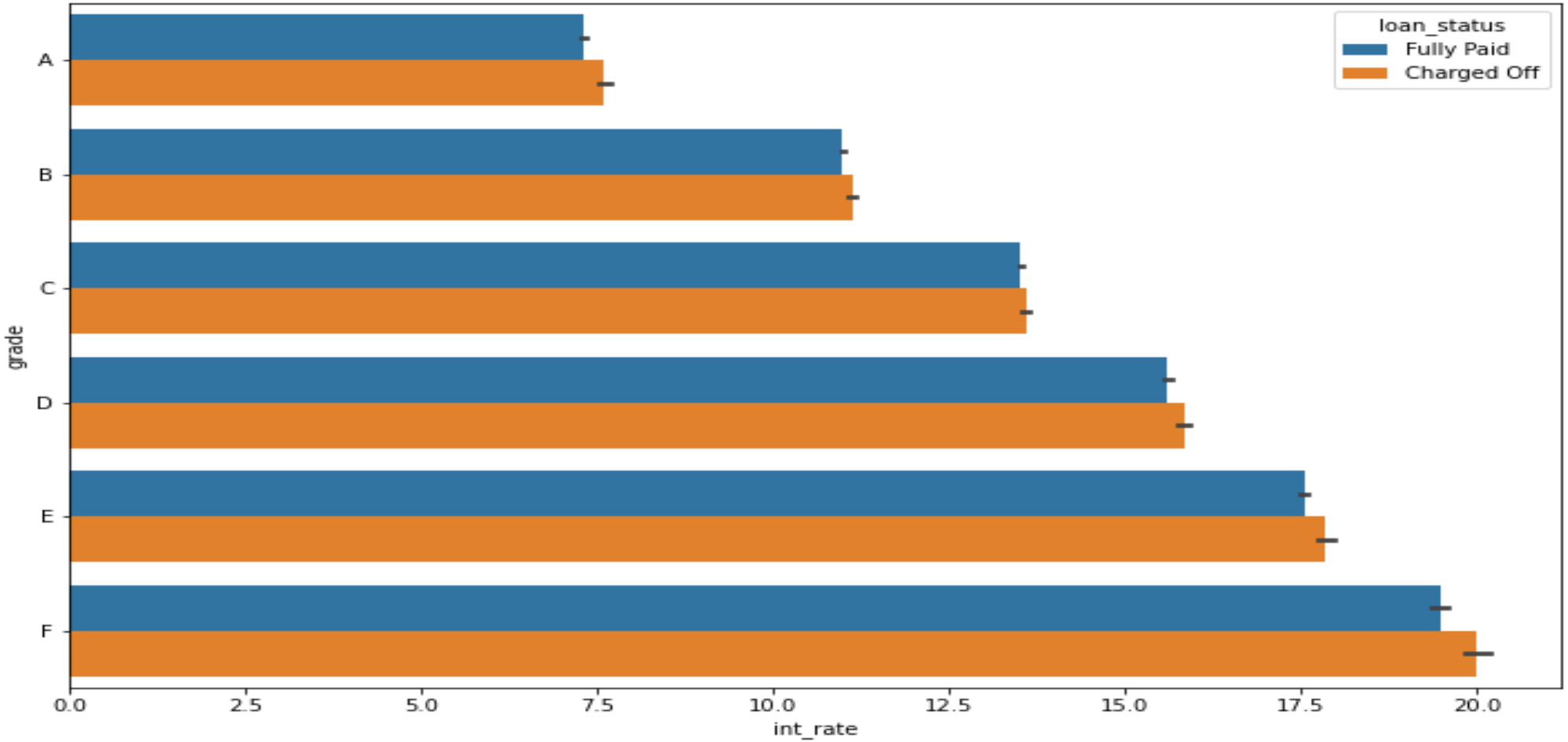




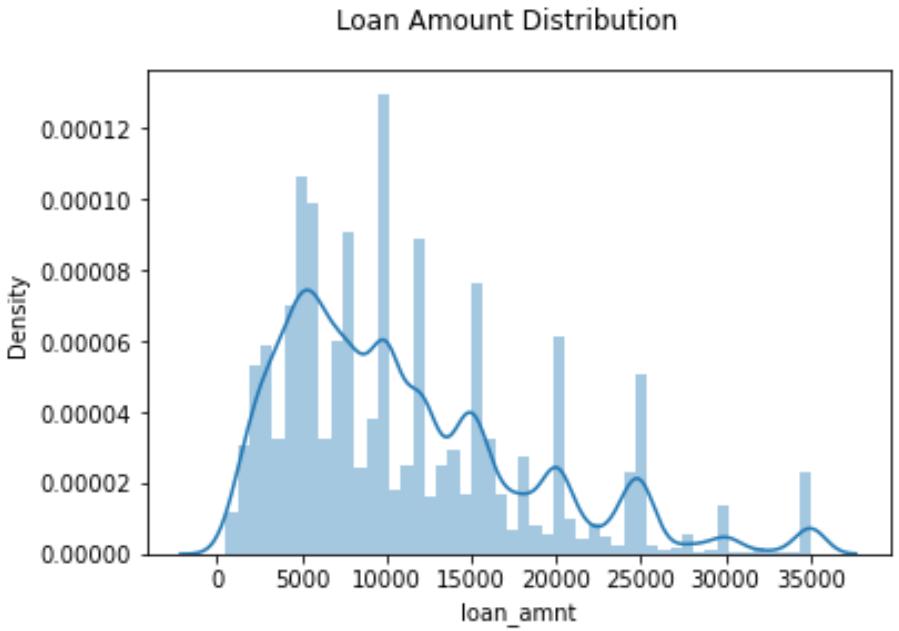
- Most of defaults have occurred in 2011 compared to the previous months.
- As the year increases the defaulters are raising rapidly and month wise Dec is likely to be the month where more defaulters are there.

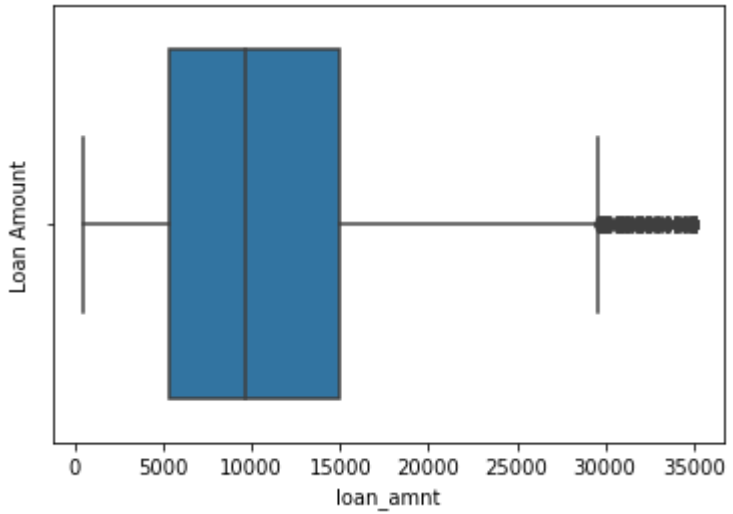
Analysis



- The Grade ‘F’ Can be categorized where more Defaulters are likely to be more due to more interest has been applied for loan.
- Through these Grades we can easily predict the output.

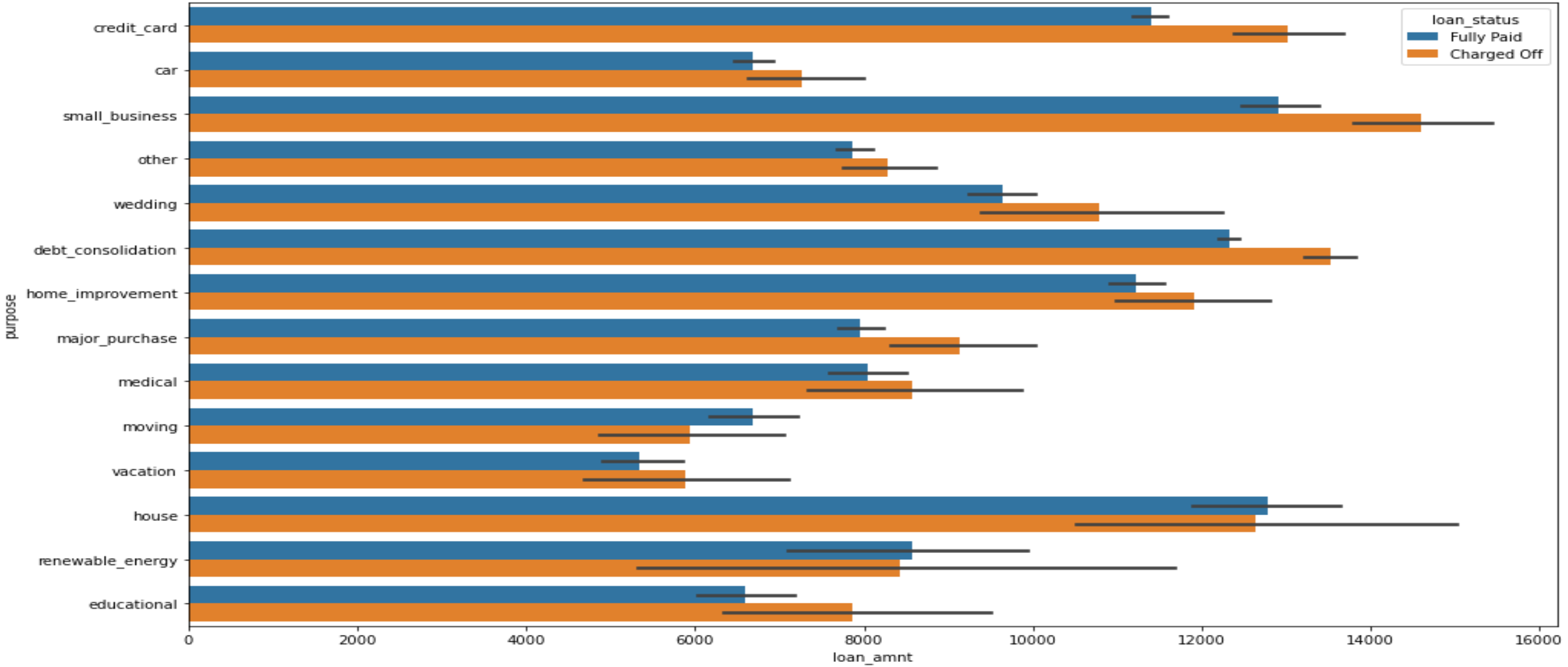
Analysis





Most of the borrowers took loans in the range 4000 to 15000 with median around 10000

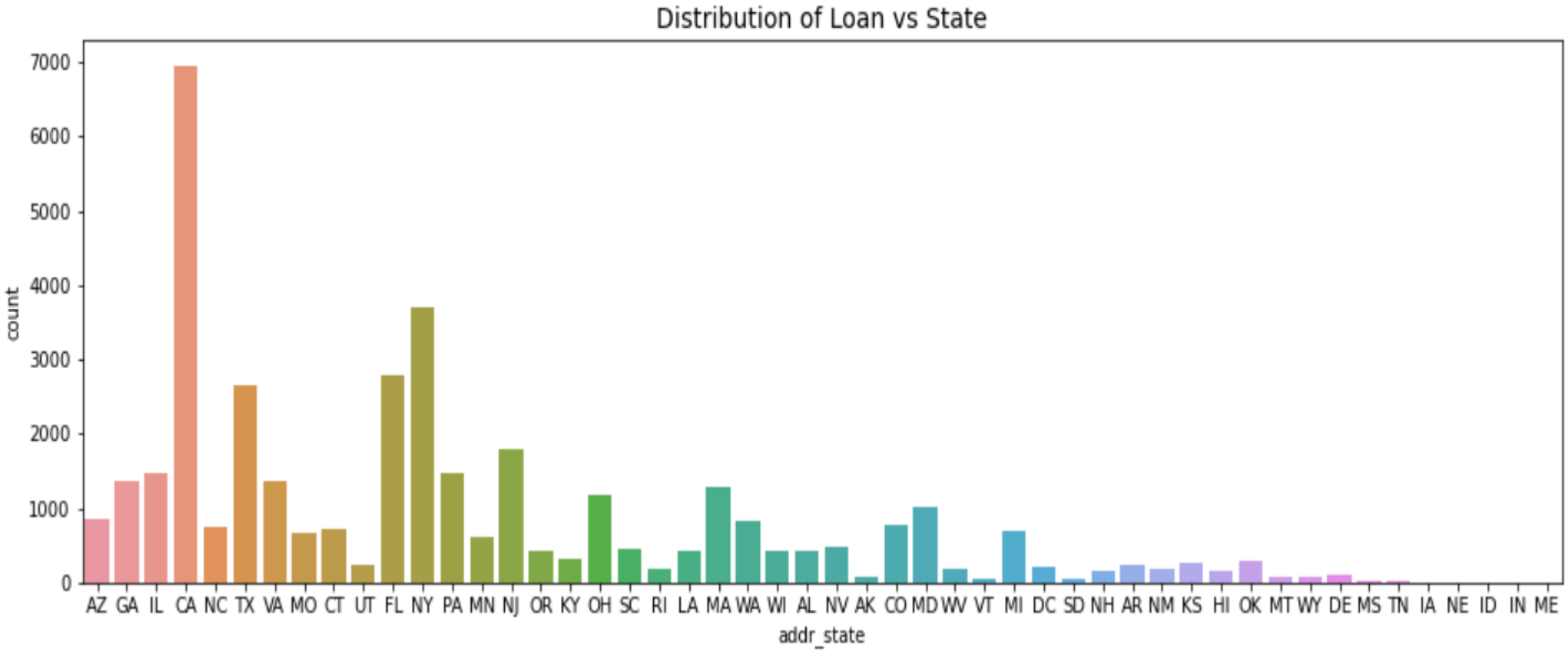
Analysis



House loan borrowers default less in terms of defaulters vs fully paid

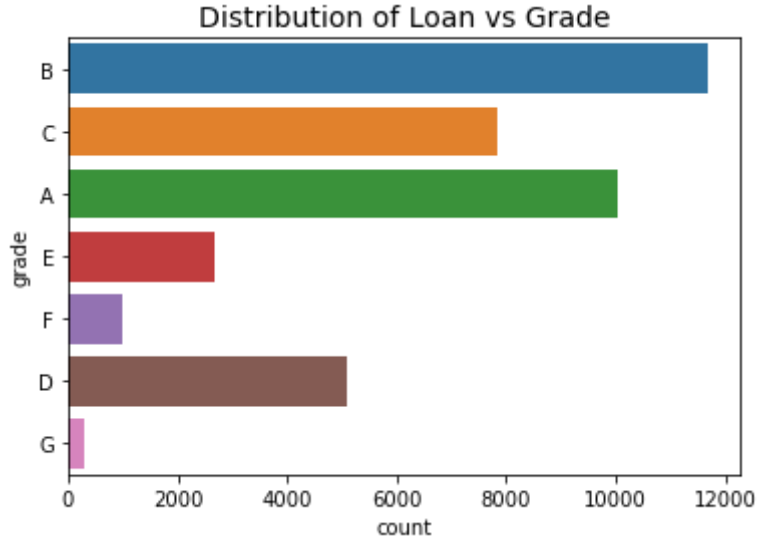
Borrowers taking loan for small_business and loan amount more than 14000 are likely to default.

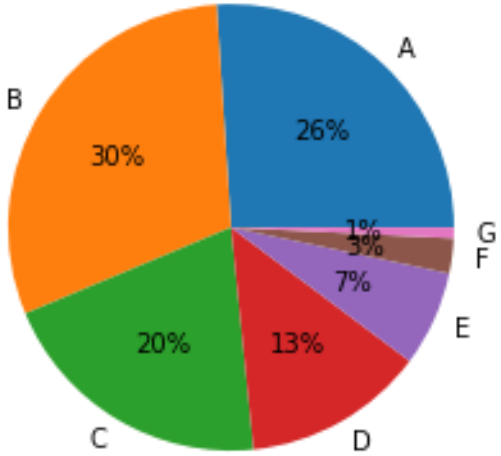
Analysis



- Most of the loans that are Borrowed is from the CA,NY and FL

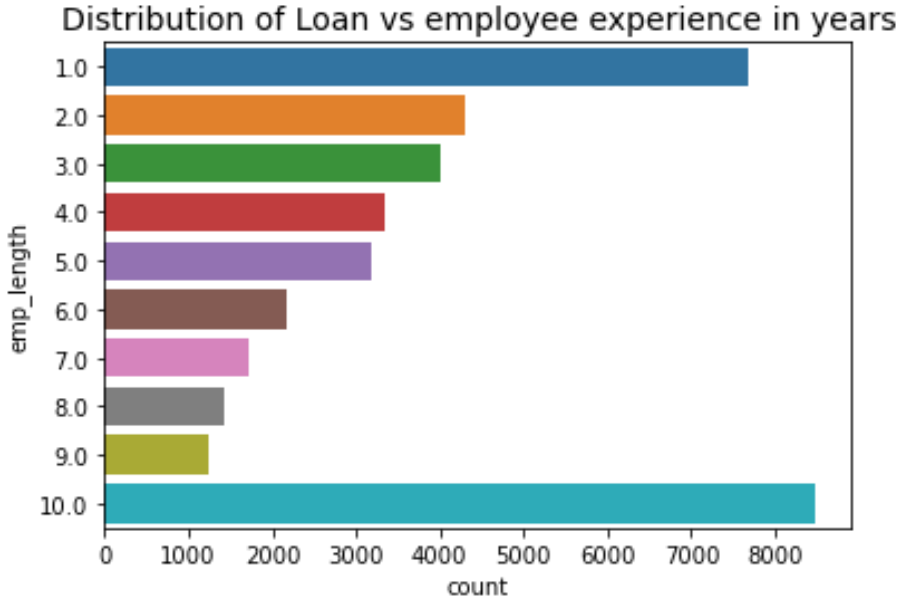
Analysis

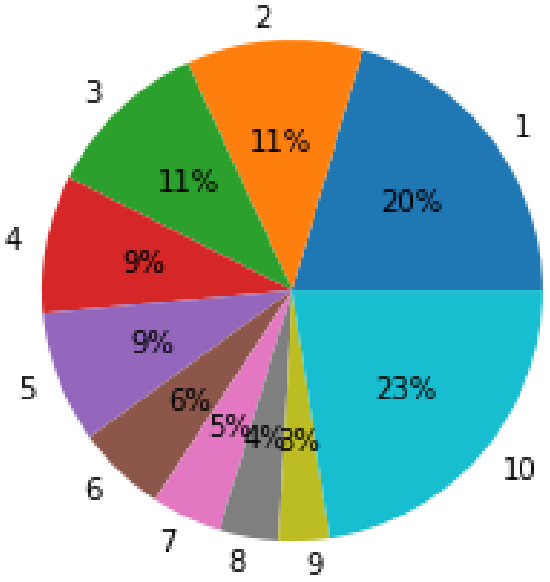




- Most of the loans that are Borrowed is from the A,B and C
- In B grade more defaulters are present.

Analysis

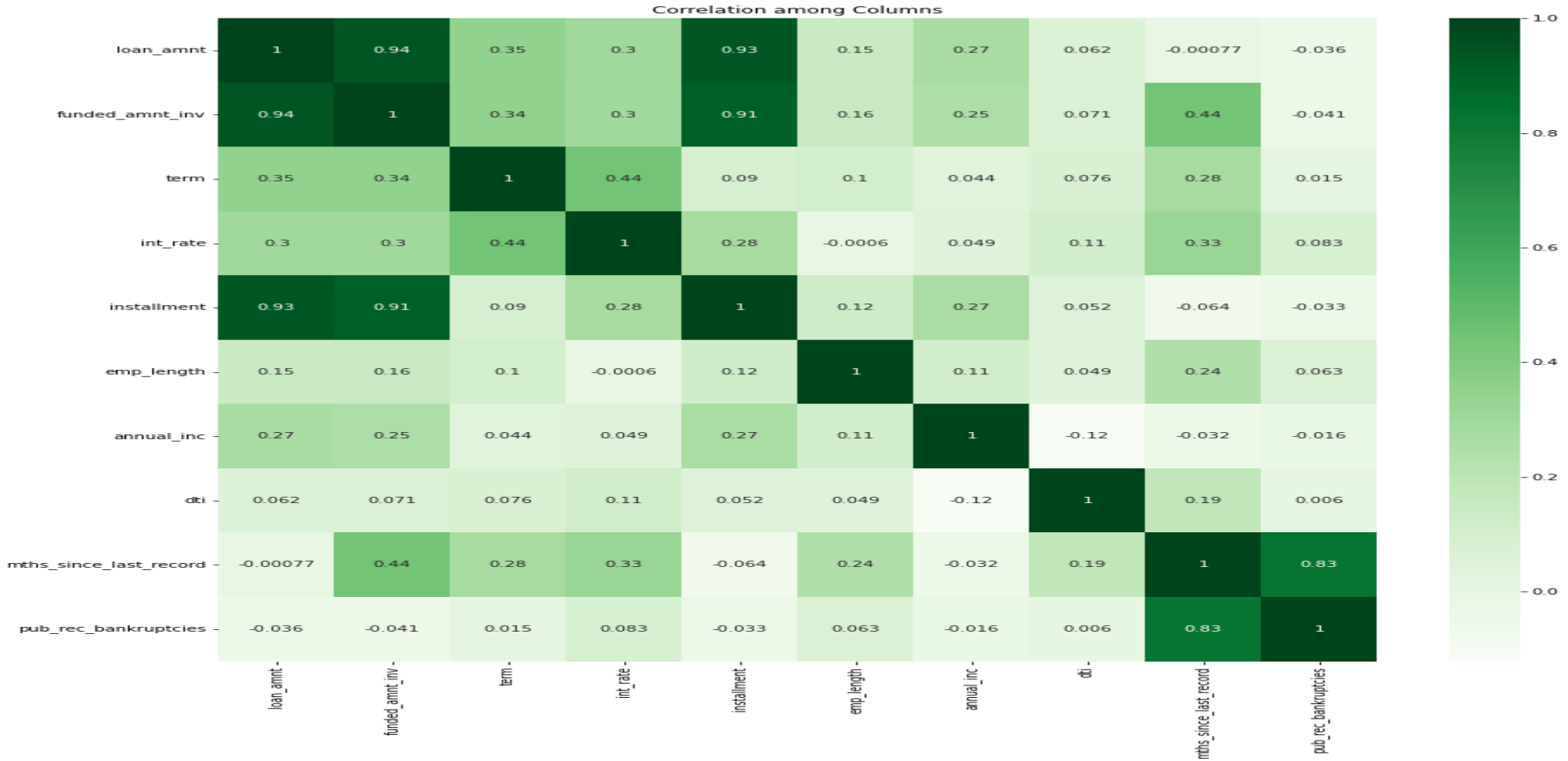




• Most of the loan borrowers have experience less than 3 years.

There is high percentage for borrowers having 10 years or more experience which could be attributed to clubbing of 10+ experiences in the same bracket

Analysis



•Co-relation between the existing Columns present in the file.

Conclusion

The above plots can give insights

- Borrowers who use the loan to clear **other debts and Small Businesses** are likely to default more
- Borrowers who receive high interest rate and belong to **F grade** are likely to default more
- Borrowers with employment of **lesser than 3 years** or 10 years are likely to default more
- Borrowers taking Loan amount in the range **5k - 10k** should be scrutinised more
- Borrowers with **no home ownership** should be scrutinised more
- Borrowers from states **CA, NY and FL** should be scrutinized more