Insights of lending club

- By Krishna Jinka and Jayachandran C

Problem statement and analysis approach

- Given a dataset containing loan data from customers, analyse and bring out various aspects such as conditions when loan might be defaulted, what kind of remediation action could be taken to avoid loan defaults etc
- Approach for this would be, to clean the data, make numerical columns free from any text, create new columns for categories, remove unwanted columns
- After data cleansing, analyse the univariate and bivariate data. Look at the columns data and see how it makes sense and look at combination of columns and bring out the insights
- Create graphs that show the analysis

Univariate and bivariate analysis

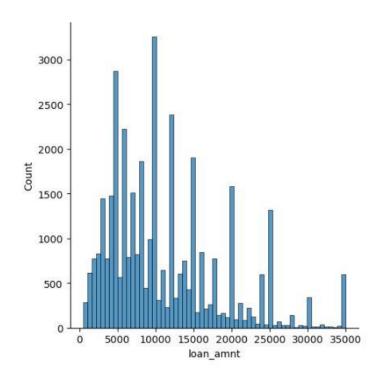
- Business terms
- Visualization
- Conclusions

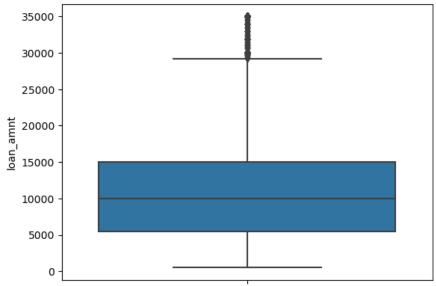
Analyse the loan amount

Shows which loan amount is highest disbursed. As per the graph, 10000 is the highest disbursed amount and second being 5000

Hence these seem to be the popular ones, the bank can focus on these loan amounts for more business

Most loan amounts are between 5K and 15K. 10K being the average





Analyse monthly instalment amount paid by borrowers

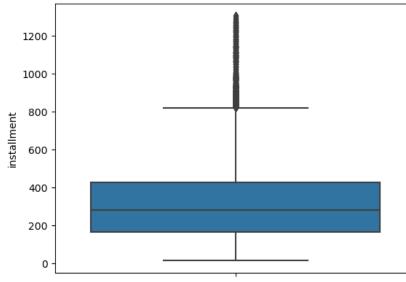
Monthly instalment paid by borrowers, seem to be the highest among loan payers.

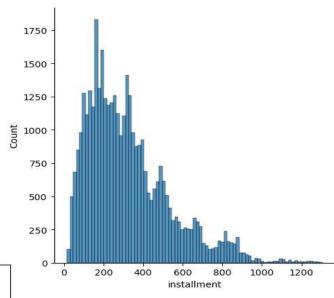
Banks can expect the monthly instalments coming in between 200 and 400 among the highest.

Based on this monthly, banks can plan how to

manage this amount.

Most of the instalment are Between 200 and 400



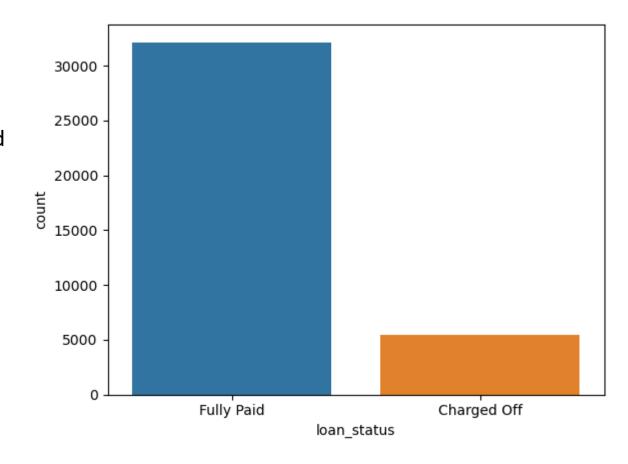


Loan status

How many loans are fully paid vs defaulted

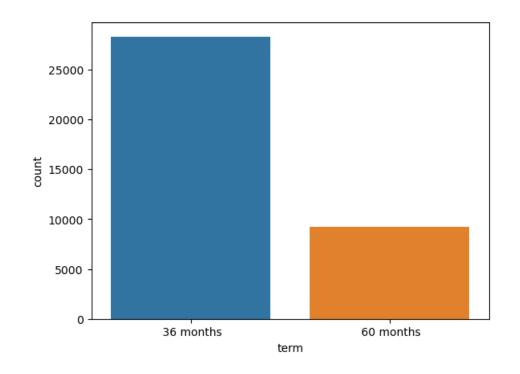
Defaulted loans are less compared to fully paid.

Defaulted loans are below 10% of that of fully paid



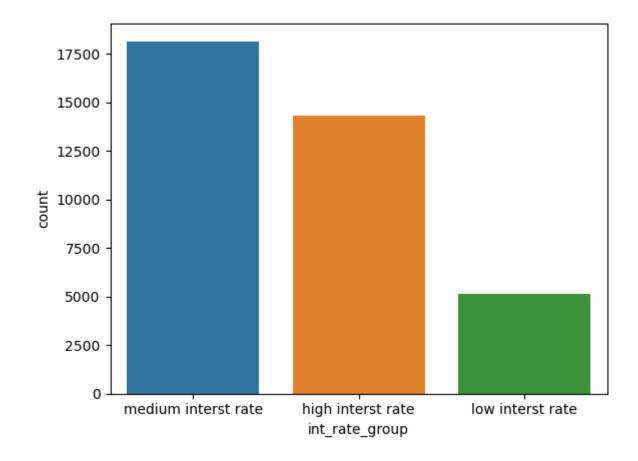
Tenure of the loans

- Which tenure is popular among the loans
- 36 months seems to be the tenure of most loans



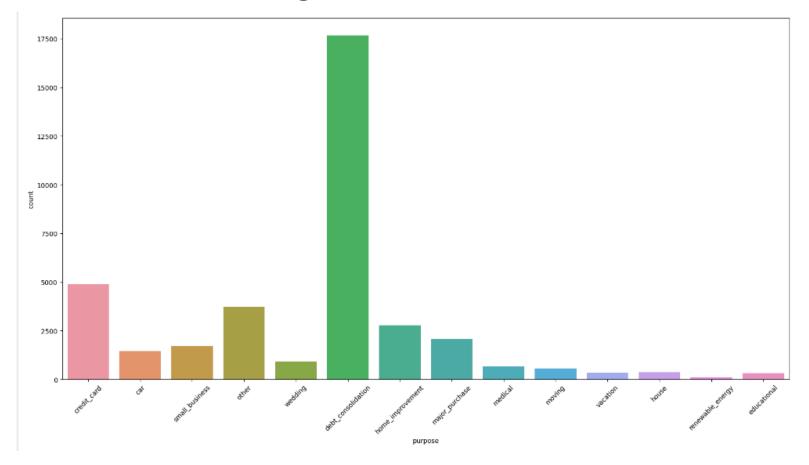
Interest rate

 Most loans have Medium interest rate followed by high interest rate. Shows that banks making good profit



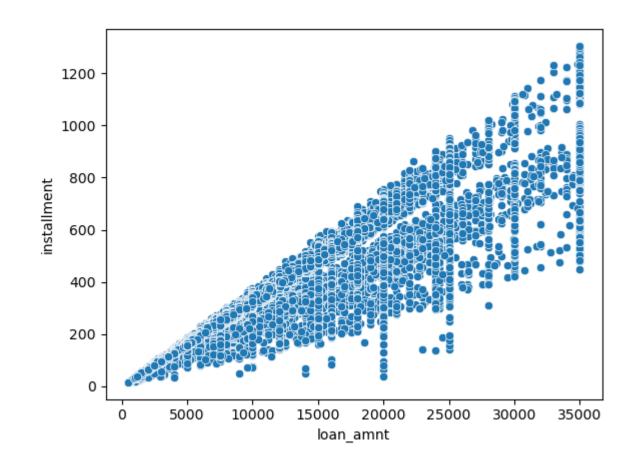
Purpose of loan?

• Debt consolidation seems to be most purpose among loans. Banks can focus on scrutinizing such loans most, focus resources there.



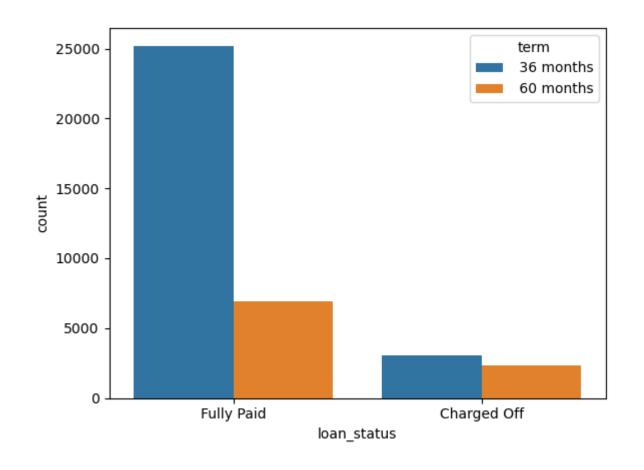
Corelation between loan amount and instalment

Both are linear corelated.
 As the loan amount increases, instalment amount also increase



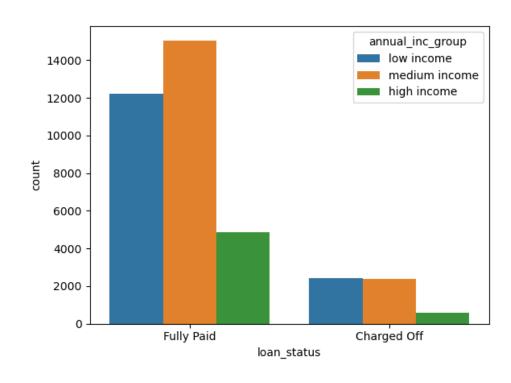
Loan status and term of loans

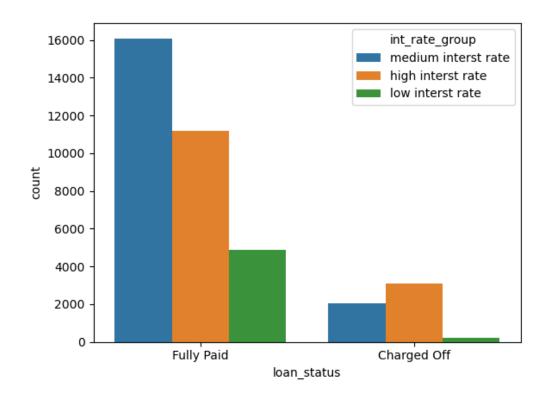
- The loan with term of 36 months are most fully paid
- Also defaulted loans are also mostly with 36 months term



Loan status with annual income and interest rate

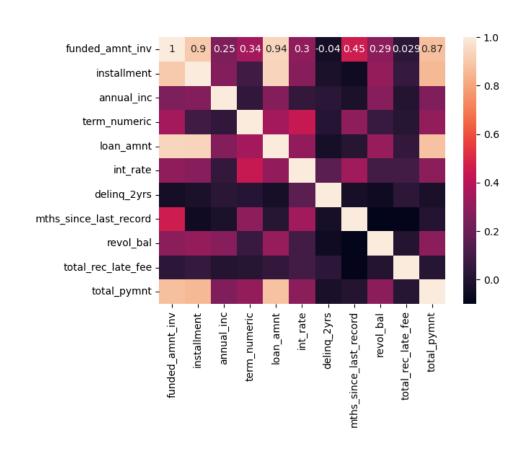
 Most of the Fully paid loans are from medium income group, along with medium interest rate





Visualize the correlation matrix of a dataset,

 Instalment, loan amount have perfect positive linear relation with funded amount.



Conclusion

- All important pointers given in each of these pages, need to be actioned.
- Need to add more scrutiny, background checks for loans taken with purpose of debt consolidation
- Popular instalment is 200 to 400, this will be the cash inflow for bank and banks need to plan to utilize this amount.
- 36 months is the popular term for all the loans, focus more on selling products with this term
- Target middle income group since they are the most fully paid loans