Lending Club Case Study

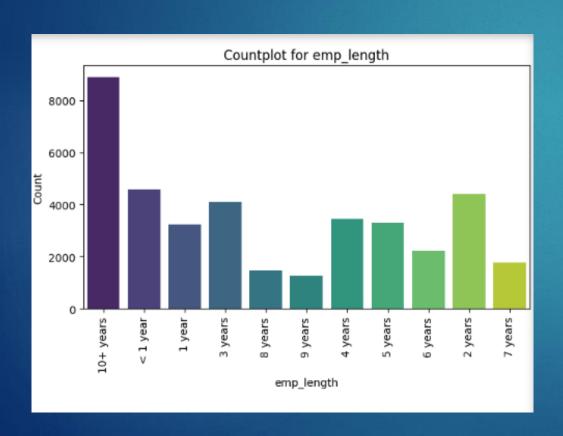
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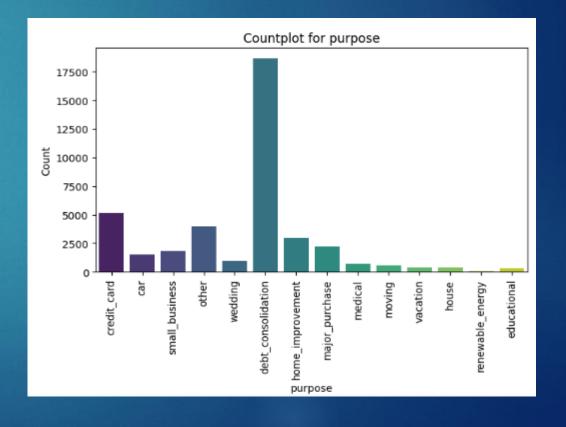
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Overview

- ▶ Lending Club is a peer-to-peer lending platform established in 2007.
- They act as a bridge between investors (lenders) and prospective borrowers.
- Lending Club conducts thorough due diligence on prospective borrowers and assigns them credit grades.
- As investors, rather than Lending Club itself, provide the loan capital, the risk of loan default is borne by the investors.

Demographics



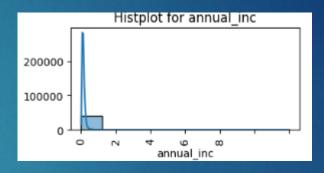


Demographics

- ▶ Looking at the data we can notice that loans are given to people with experiences ranging from 0 10+ and loan count is higher with 10+ YOE people
- Debt consolidation is the main reason why people prefer taking loans. It is combining multiple debts (such as credit card balances, loans, or other obligations) into a single loan or repayment plan. The goal is to simplify and potentially reduce the complexity and overall cost of managing multiple debts by replacing them with one manageable loan.

Income Understanding

- Upon checking the income details, we found that the average salary of employees is around 69000 and median stands at 59000. However, we see the max as 600000.
- There are many outliers as we can even notice that 75th percentile is also at 82000

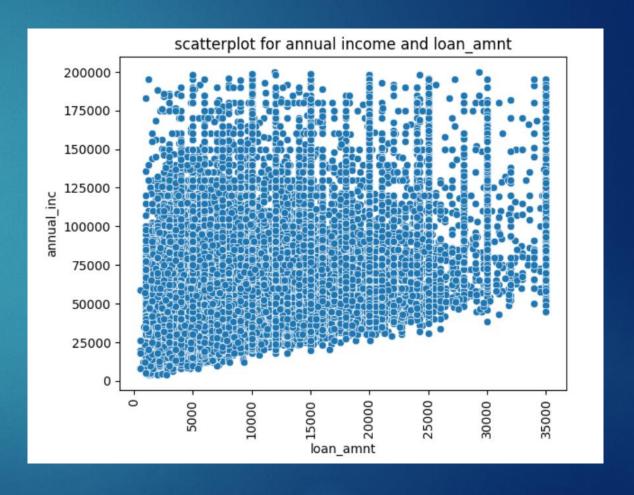


| count | 3.971700e+04 |
|-------|--------------|
| mean | 6.896893e+04 |
| std | 6.379377e+04 |
| min | 4.000000e+03 |
| 25% | 4.040400e+04 |
| 50% | 5.900000e+04 |
| 75% | 8.230000e+04 |
| max | 6.000000e+06 |

Income Vs Loan

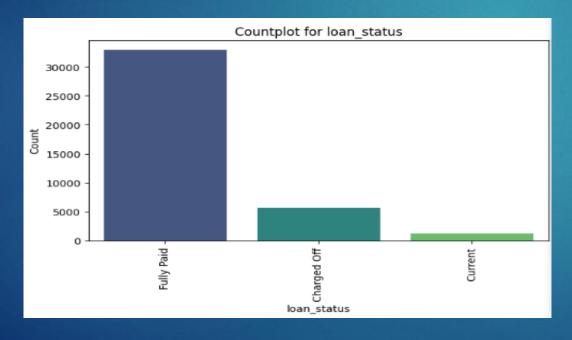
There doesn't seen to be much of correlation between loan amount and annual income of people.

But its still observable that higher loan amount are preferred only when income levels are increased.



Correlation

It is obvious that the loan amount is highly correlated with total payment as the count of loan status fully paid is much more than current status

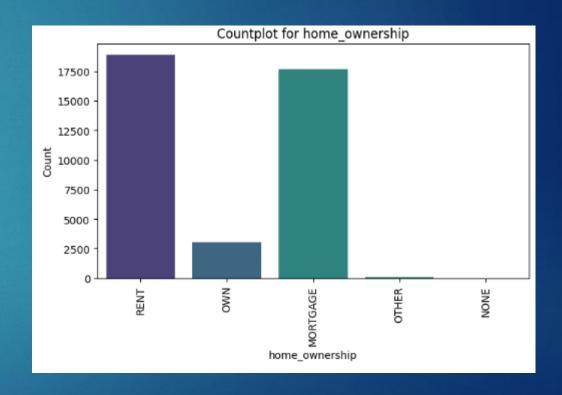


```
total_pymnt -0.890.900.88
                                              0.86
        total_pymnt_inv -0.850.870.91
                                              0.82
         total_rec_prncp -0.850.870.85
                                              0.85
            total_rec_int -0.730.740.730.530.63
      total_rec_late_fee -
              recoveries -
collection_recovery_fee -
      last pymnt amnt -0.450.450.44
 pub_rec_bankruptcies -
                                               installment
                                      funded_amnt_inv
                             loan_amnt
                                 funded
```

Home Ownership

People who opt for loan either have homes on rent or homes on mortgage.

It can either mean that their homes are put on mortgage. Since, there were no repetitive members, it can be that their homes on mortgage are for this loan application itself.



Positives

- People with all income ranges can take loan
- Approx 90% People even tend to pay back the loan.
- People with all YOE tend to take loan
- People are okay with the rate of interest offered as we see no relation between ROI and Loan Amount

Conclusion

- This Case study analysis is to understand the loan related parameters and find any relation
- Its always better to understand the repayment capabilities before issuing loans.