

Lending Club Case Study

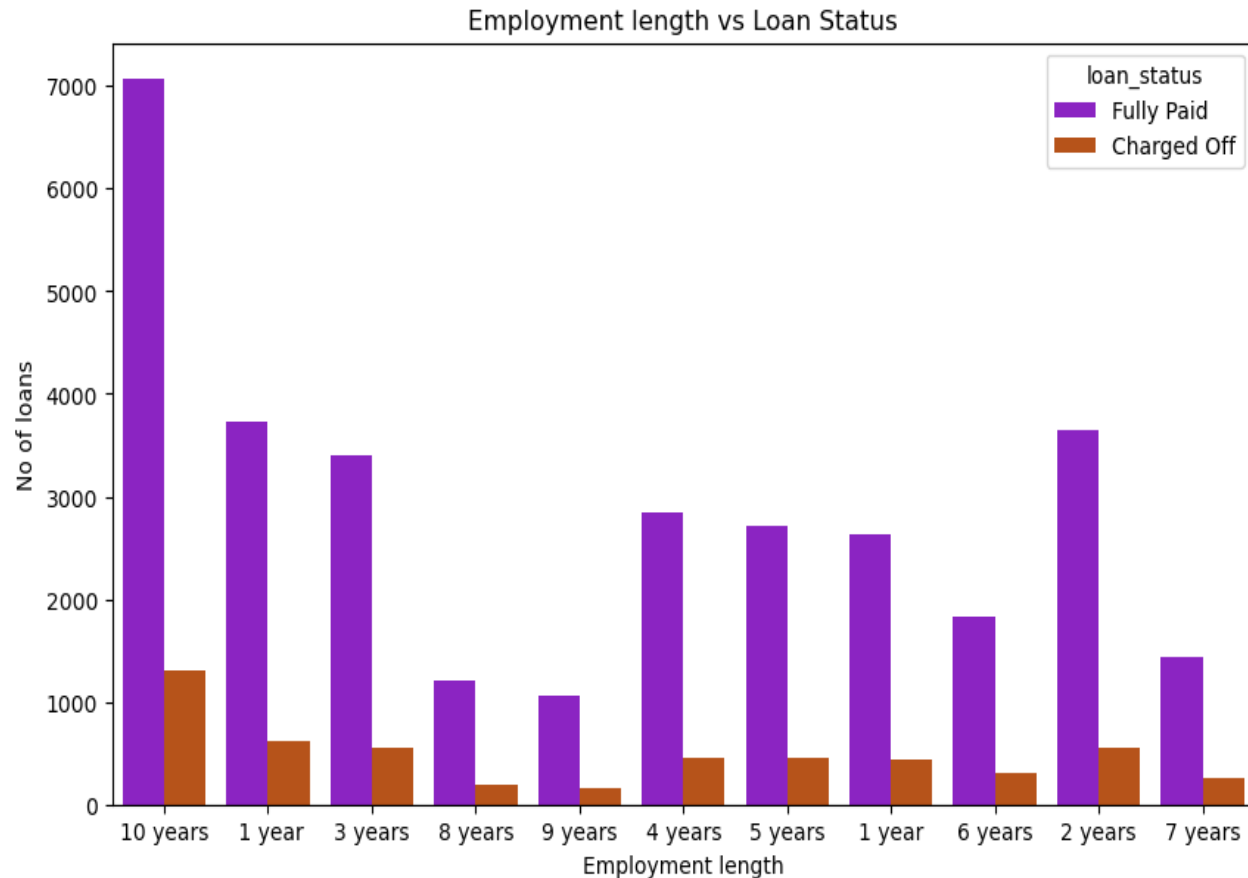
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Problem Statement

1. This is a company which lends money to the people in the form of various short term and long term loans.
2. When the company receives a loan application it has to make decisions based on the applicants ID and profile, whether to approve or reject the request.
3. Company can use these observations for understanding the reason of loan approvals, rejections, defaulters and settlements.

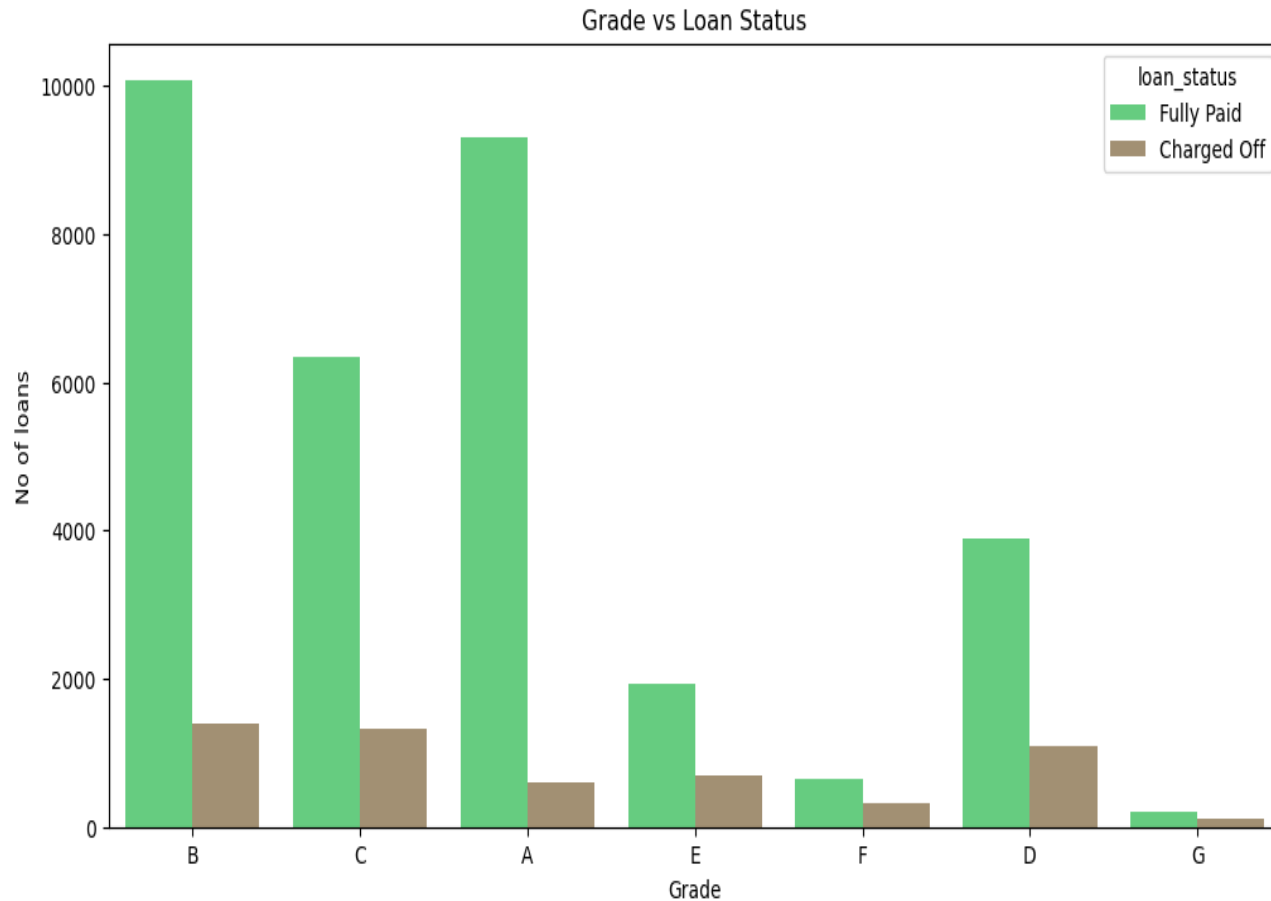
Employment length



Observation

- Maximum loans are issued for 10 years and they are the maximum defaulters

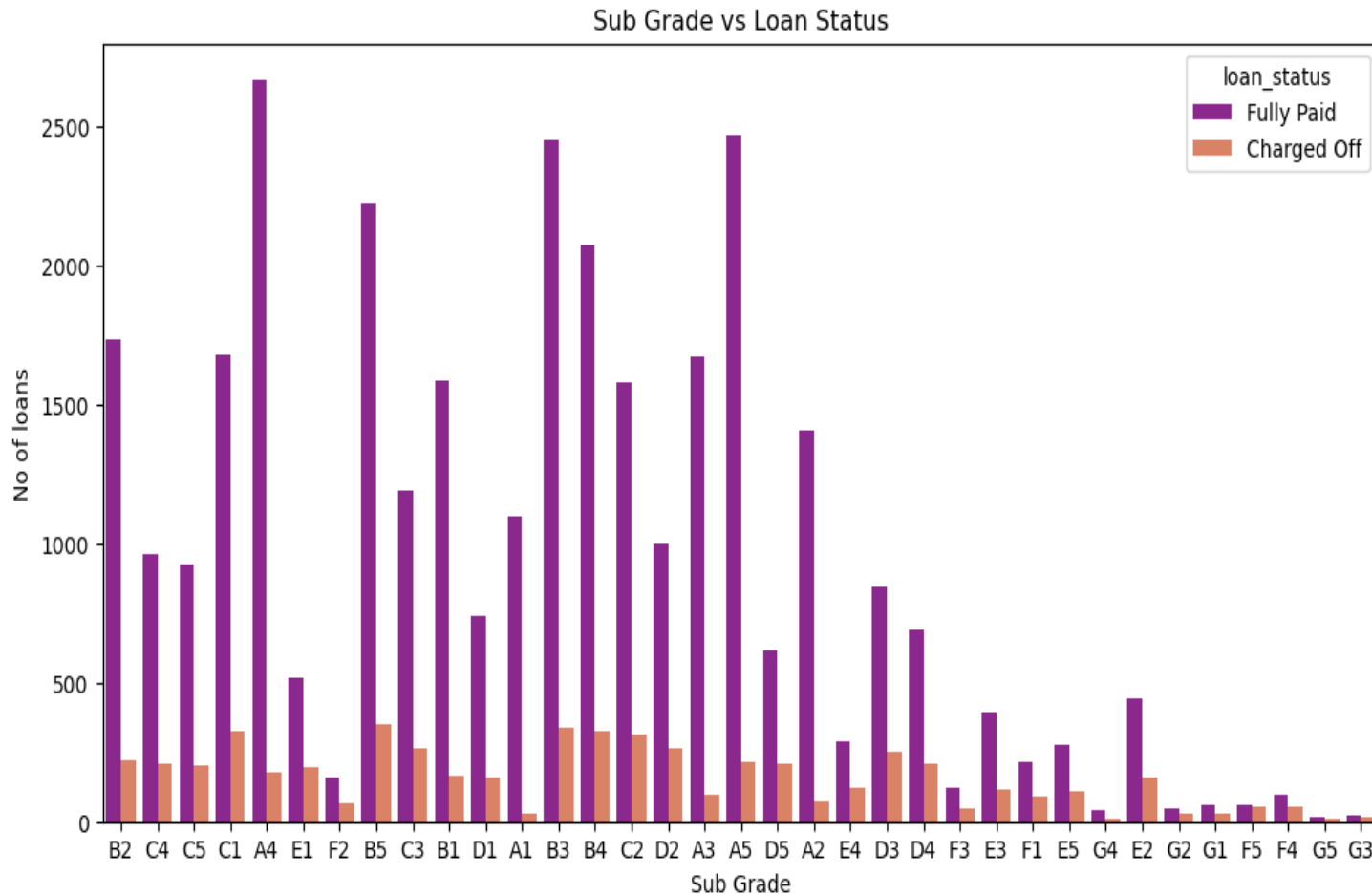
Grade



Observation

- Grade B, C and D are top three in Charged Off
- Grade E is median
- Grade A, F, G

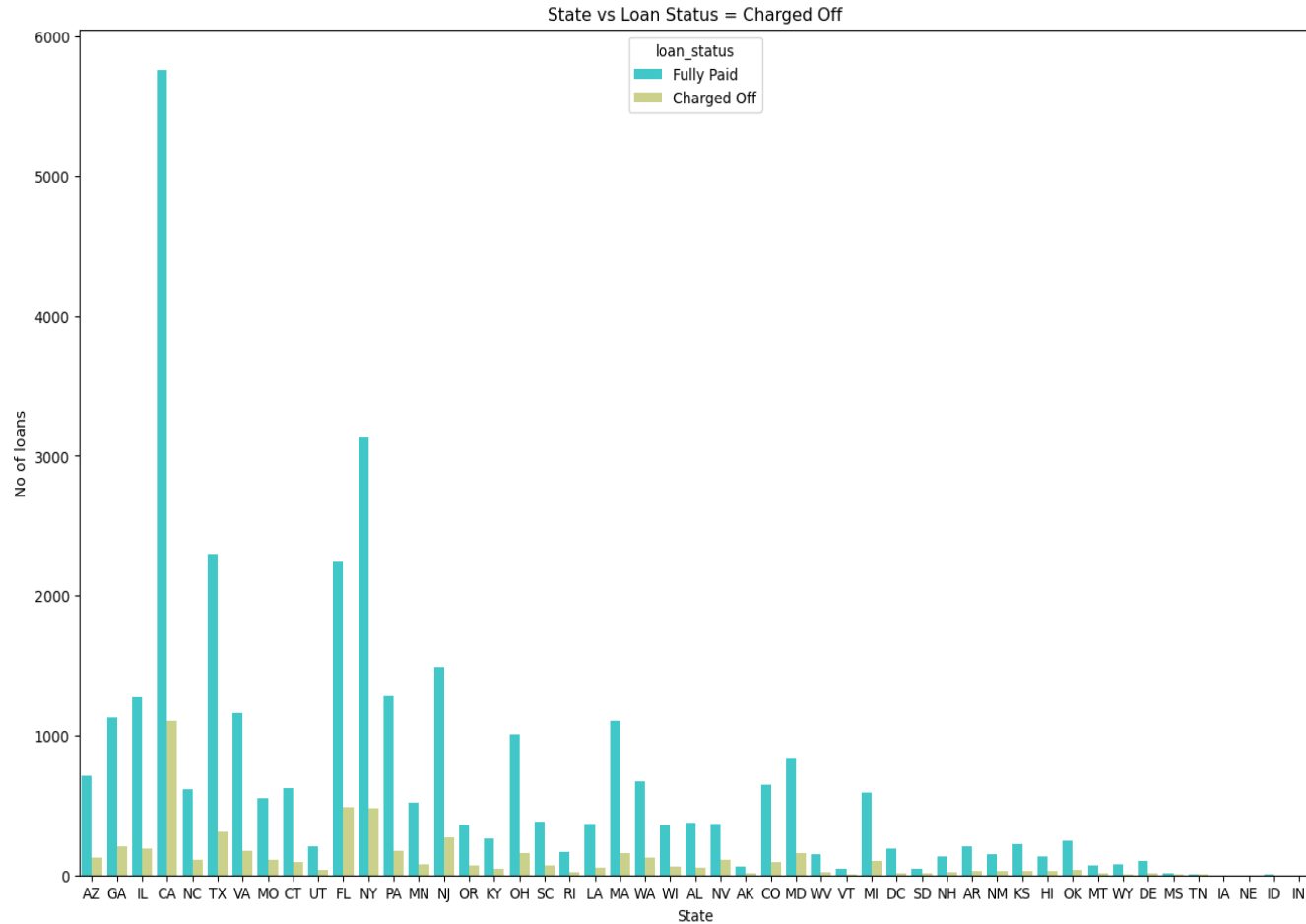
Sub grade



Observation

- Sub Grade B3, B4, B5, C1, C2, D3, D4 top sub grades in Charged Off
- Sub Grade A3 is median
- Sub Grade G1, G2, G3, G4, G5 were non significant in charged off

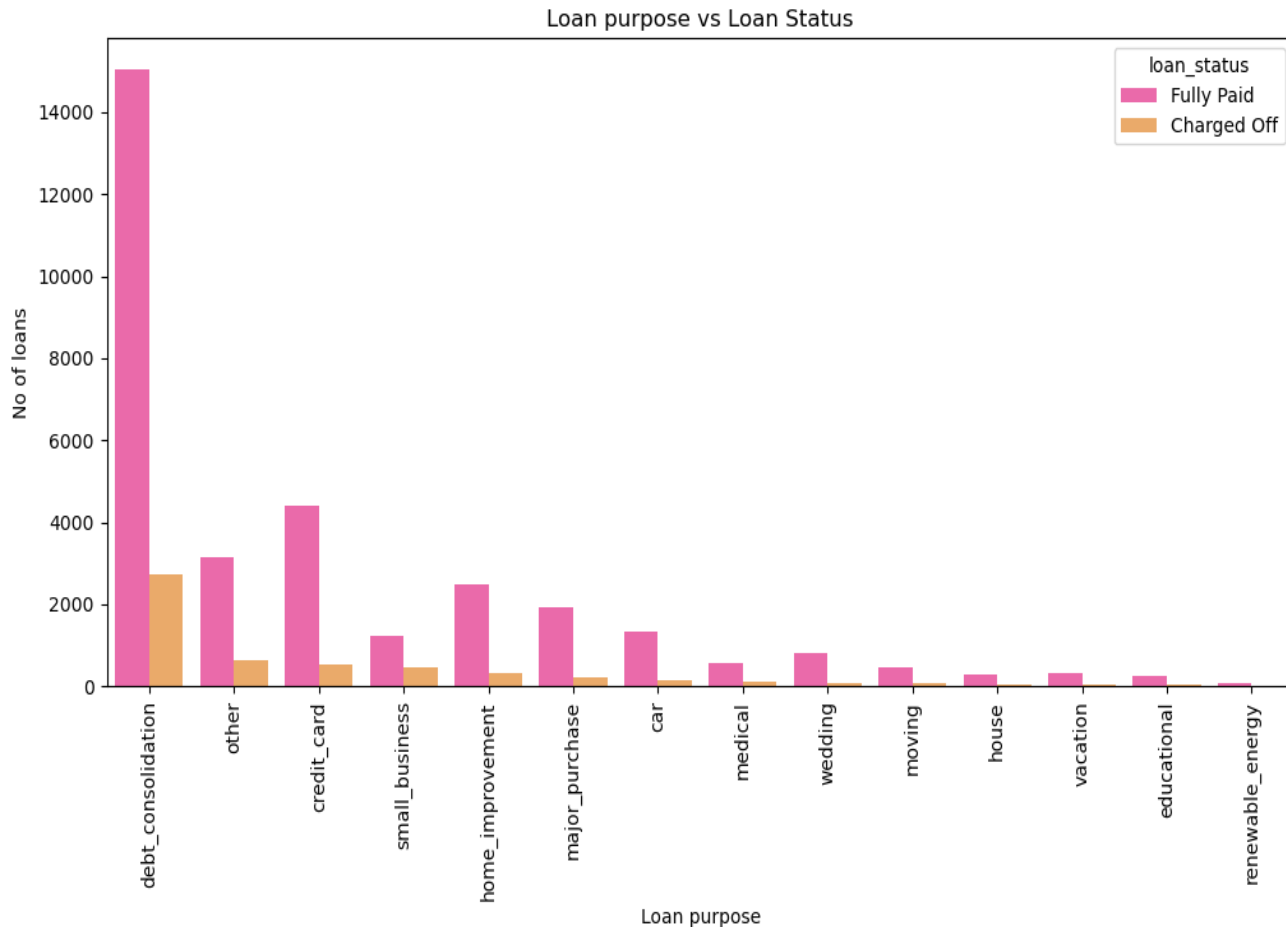
State



Observation

- Maximum Defaulters are from States CA, FL, NY and NJ.

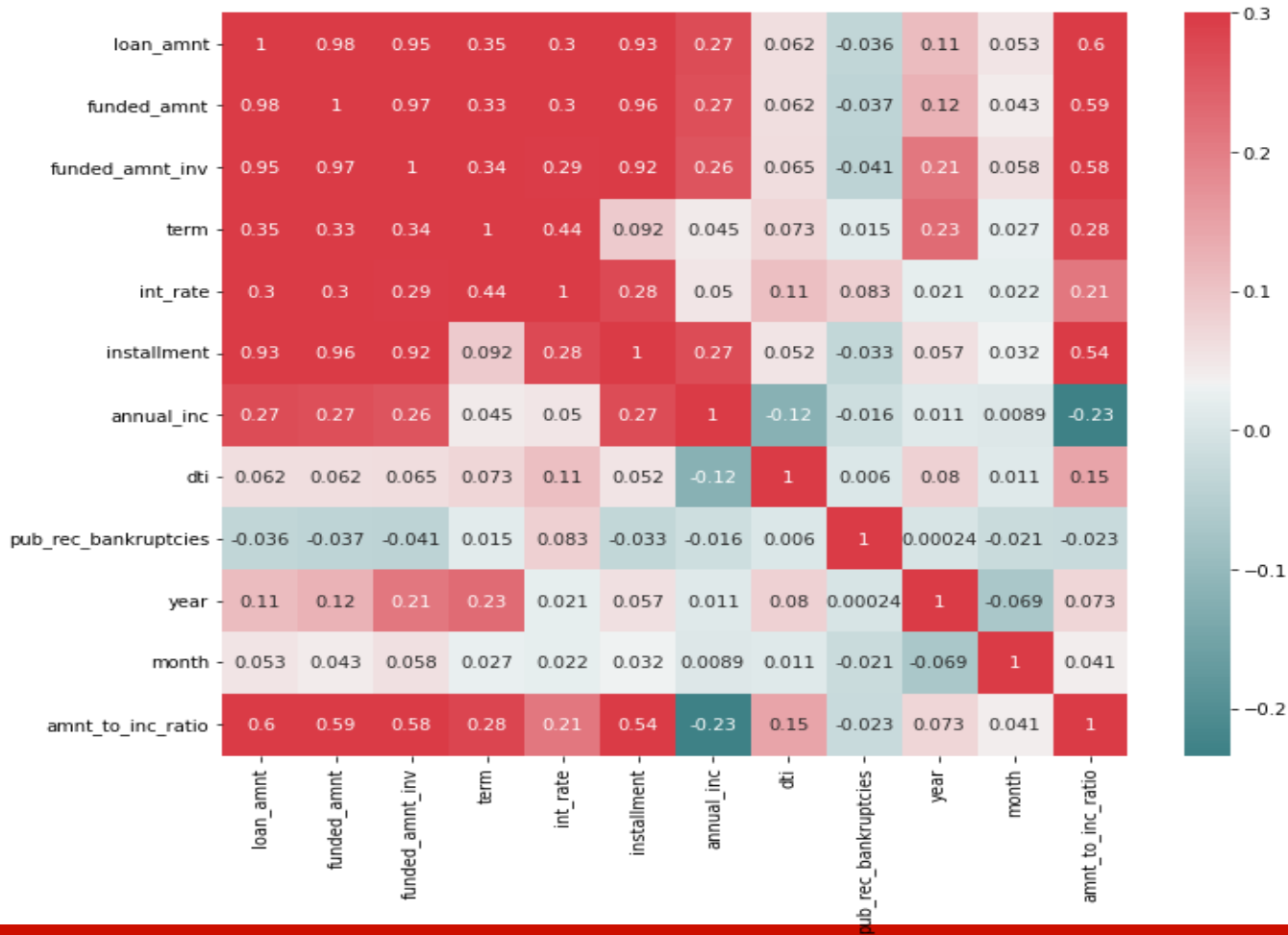
Loan purpose



Observation

- Maximum defaulters are the ones who took loans for the purpose of debt consolidation, other, credit card and home improvement categories have failed to pay the loan compared with education / renewable energy
- Maximum loans are issued for debt consolidation

Multivariate Analysis



Observation

- Correlation graph shows fields loan_amt, funded_amt, issue_y, annaul_inc, installment, issue_m have negative impact on the loan_status variable

Conclusion of Analysis for Charged off loans

Based on my learning and analysis the following fields are contributing for loans getting Charged off

- Employment length-
- Grade
- Sub grade
- State
- Loan purpose

Thank you
