

Lending Club Case Study

Presented By:

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Overview

Lending club is one of the online loan marketplace which used to provide various kind of loans to the borrowers

In this case study our main motive was to analyze the data set and find out the pattern or driver variables which can help us to identify defaults

Various types of techniques is being used in this analysis like univariate, segmented univariate and bivariate analysis.

Technology Used

Python

Pandas

Numpy

Matplotlib

Seaborn

Step By Step Guide

Loading
dataset into a
data frame

Data cleaning

Data
Understanding
and filtering

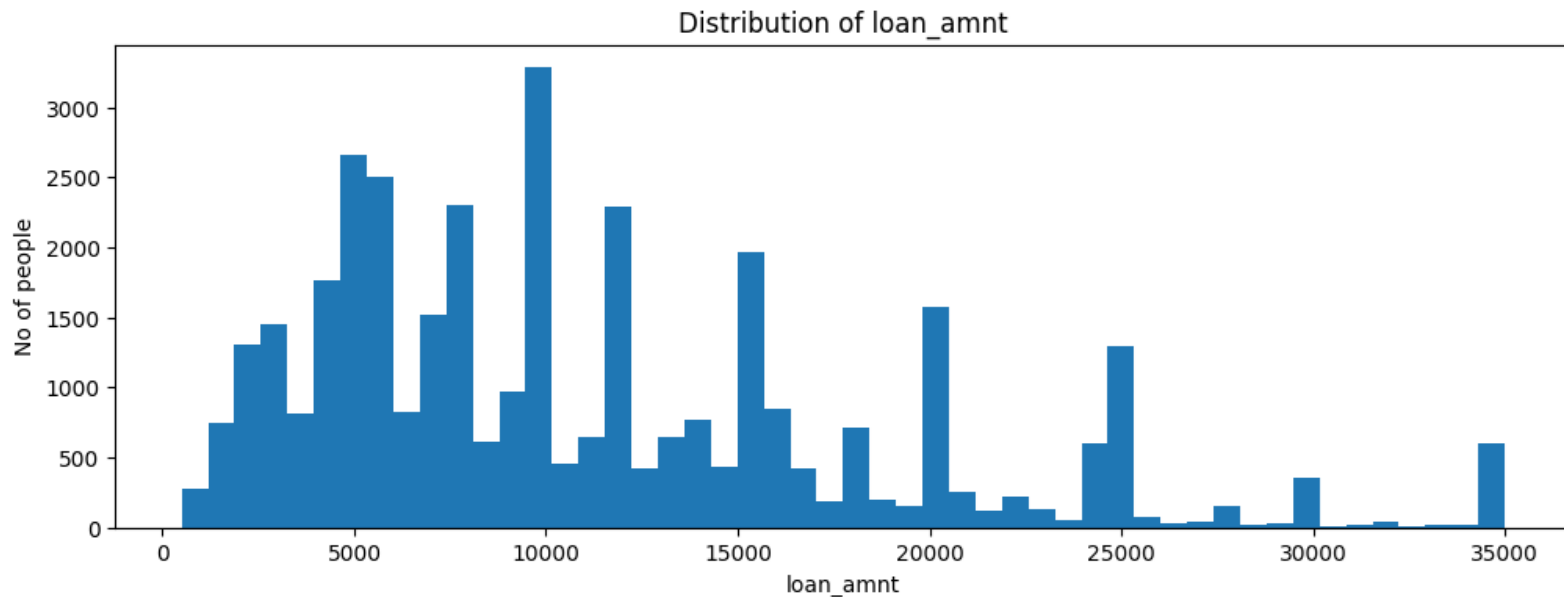
Univariate
Analysis

Segmented
Univariate
Analysis

Bivariate
Analysis

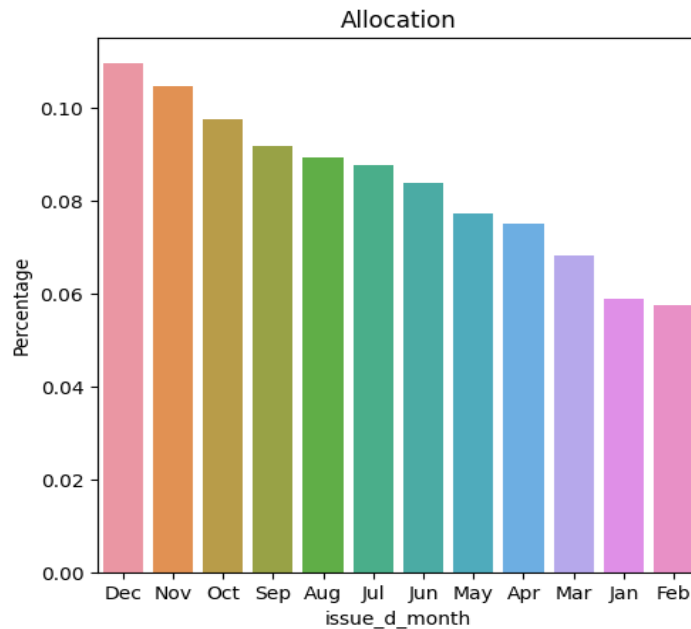
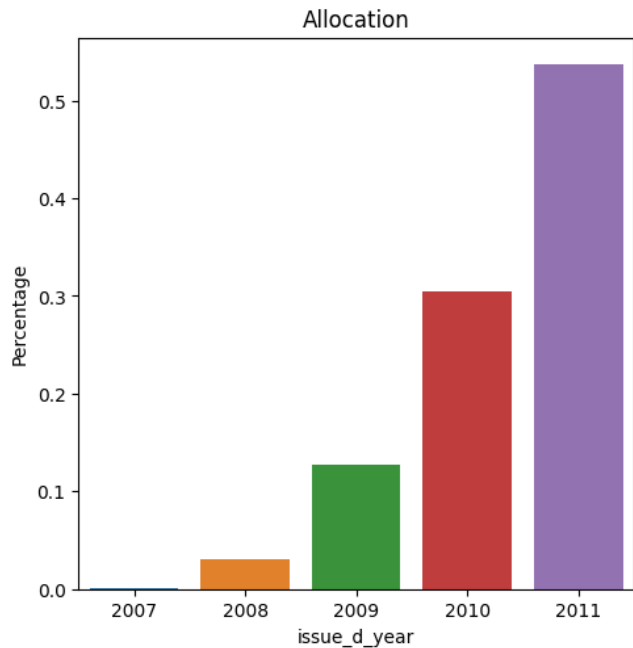
Conclusion

Distribution of Loan

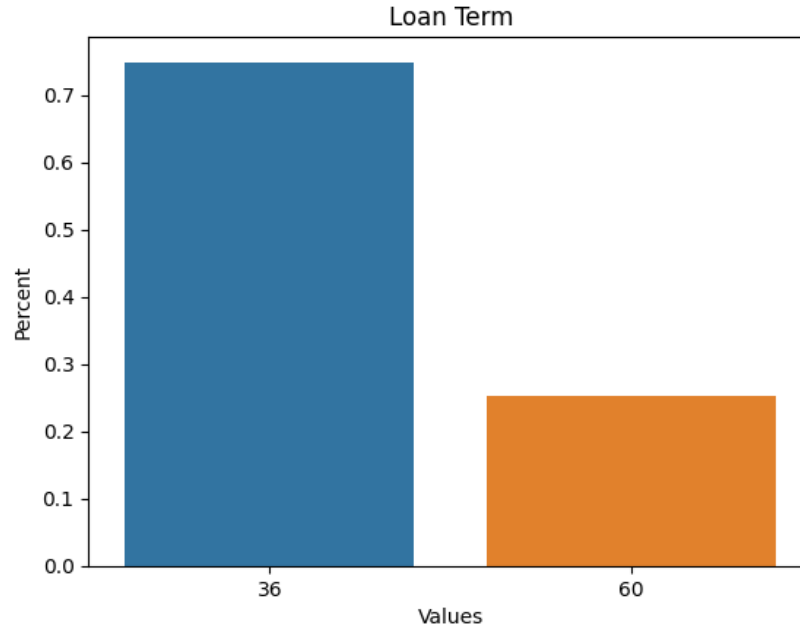


The data reveals that while smaller loans are more common, there is a tail of larger loans, albeit with lower frequencies. This suggests that smaller loans are more popular or more accessible, while larger loans are less common, possibly due to stricter eligibility requirements or borrower preferences.

Year and Month Wise Analysis

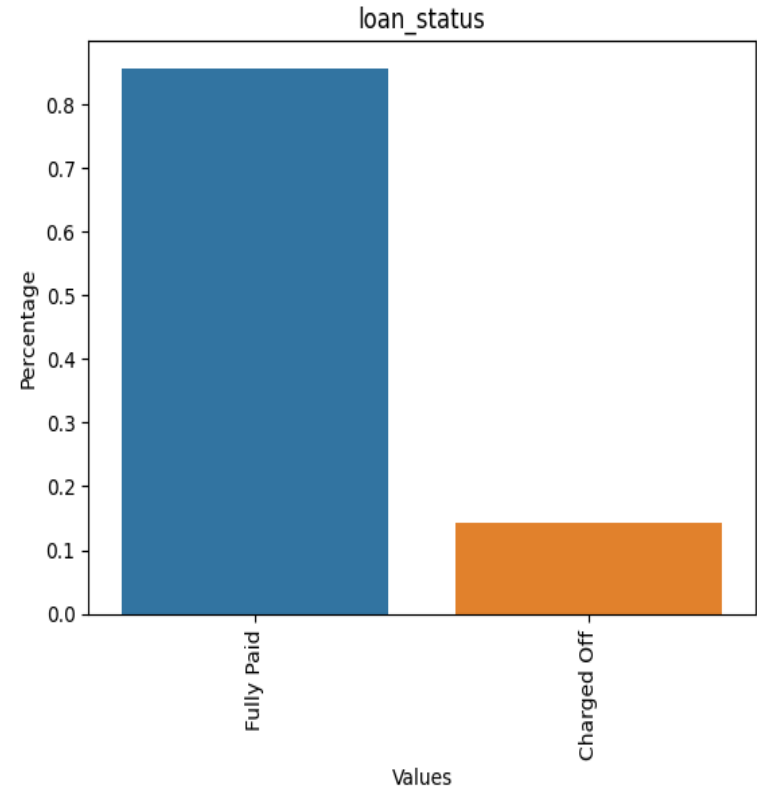


Here we found that Lending club increased the loan distribution drastically each year

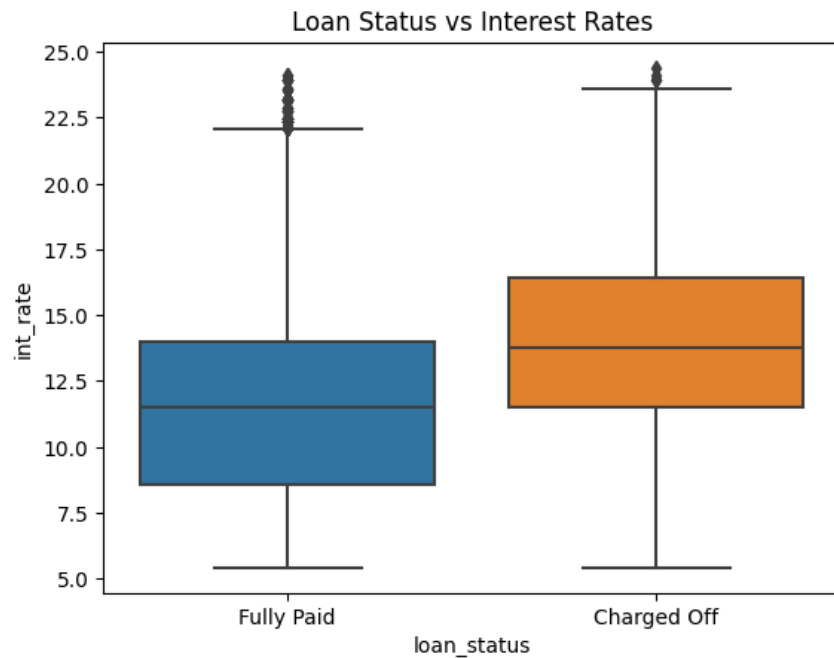
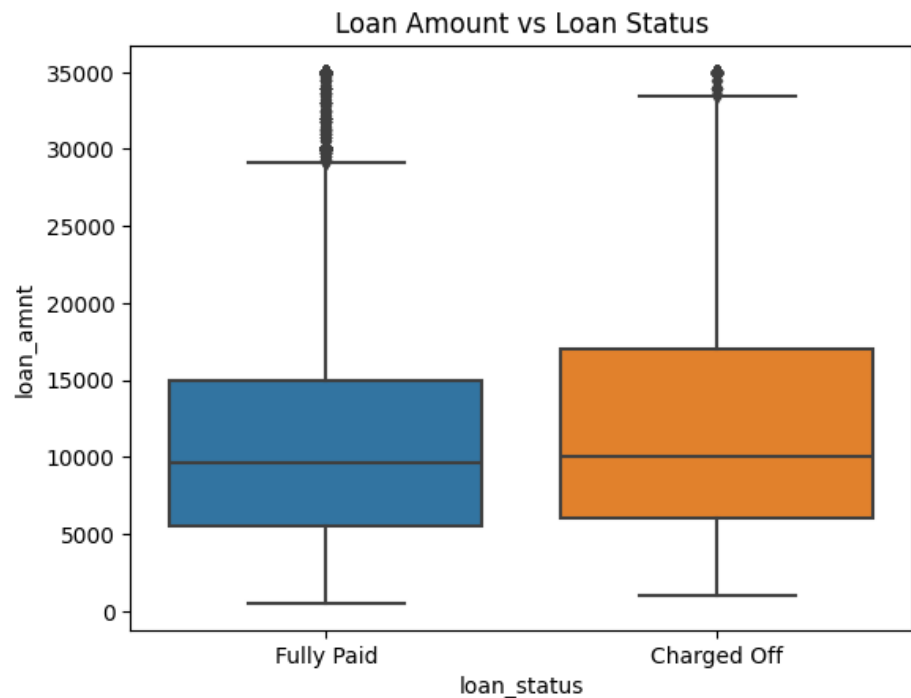


There are only two loan terms 36 and 60 months. Around 75% borrowers took loans with 36 months term

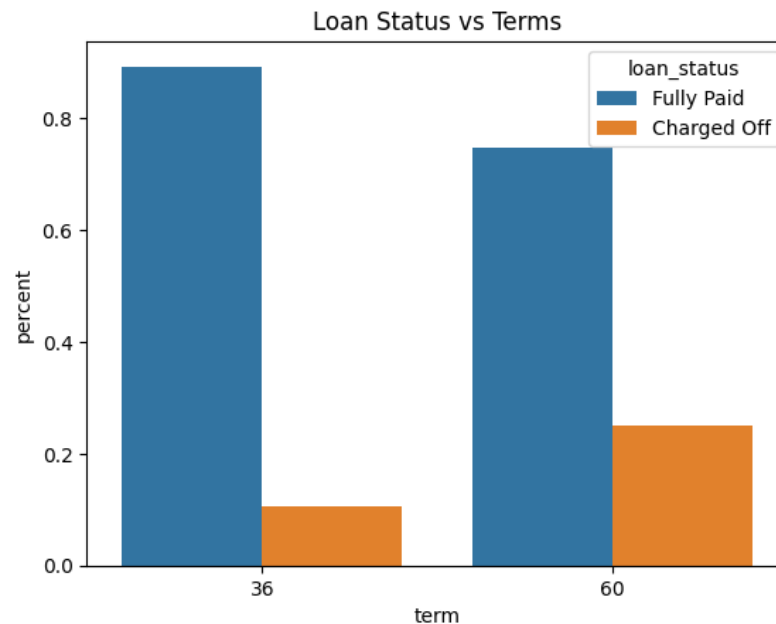
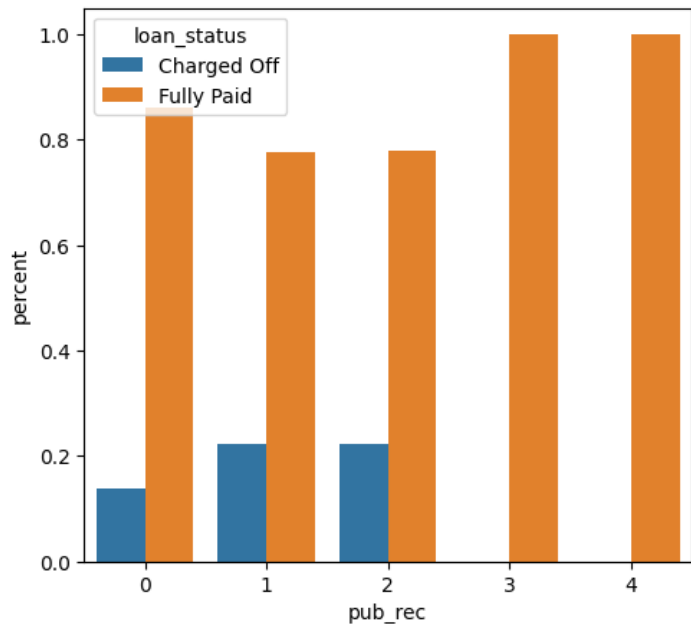
We found that around 85% people fully paid the loan while 15% were charged off

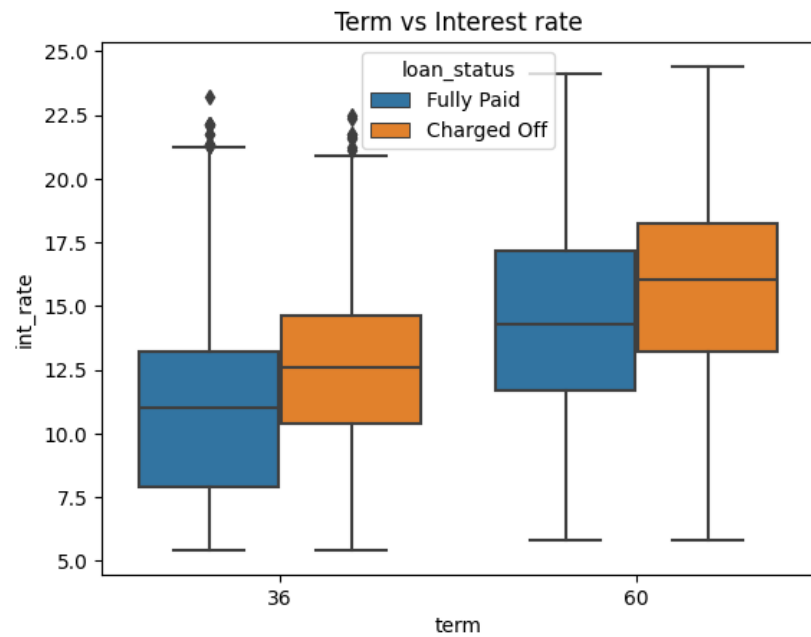
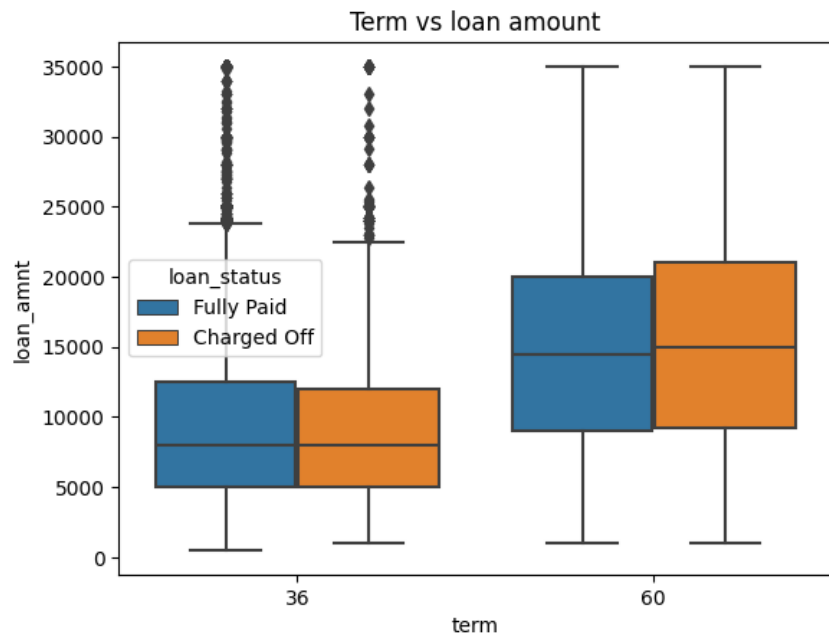


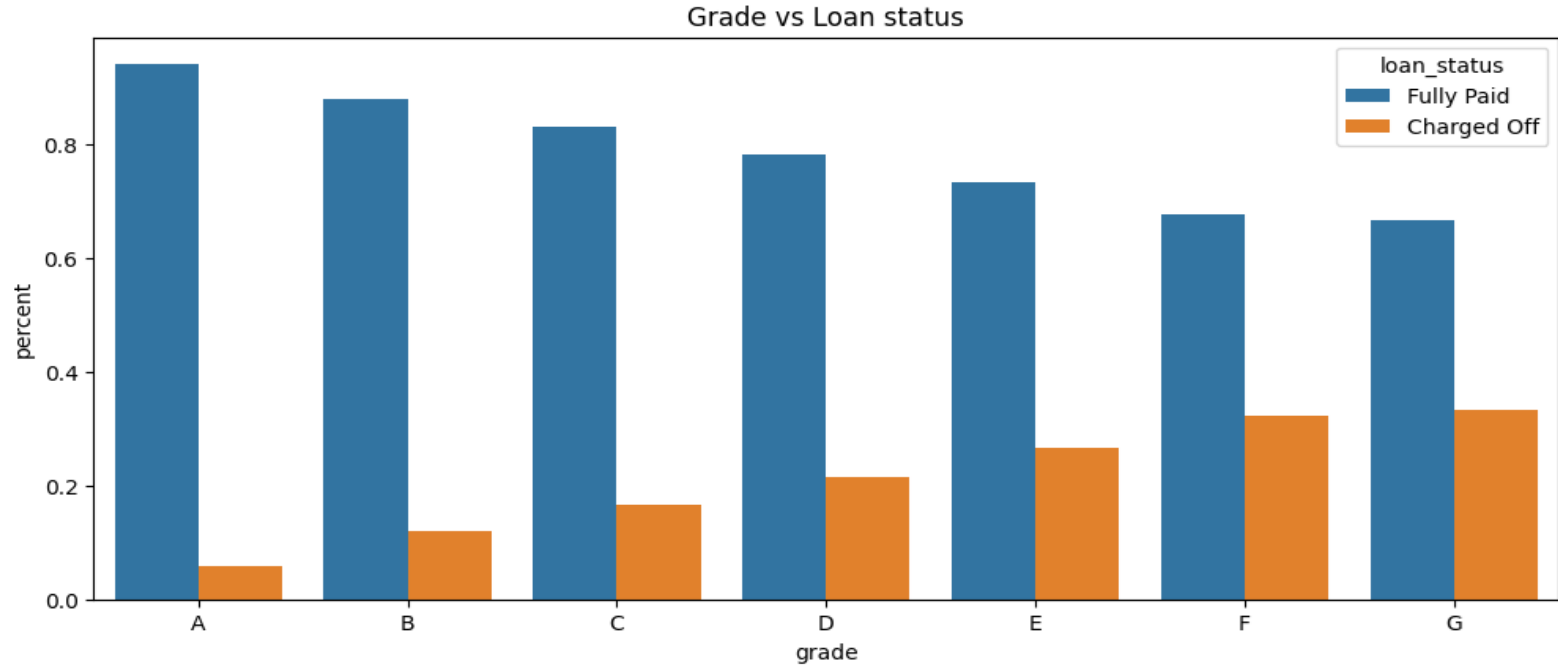
From the below two graphs higher the loan amount and higher the interest rate, higher the chances of loan defaulters



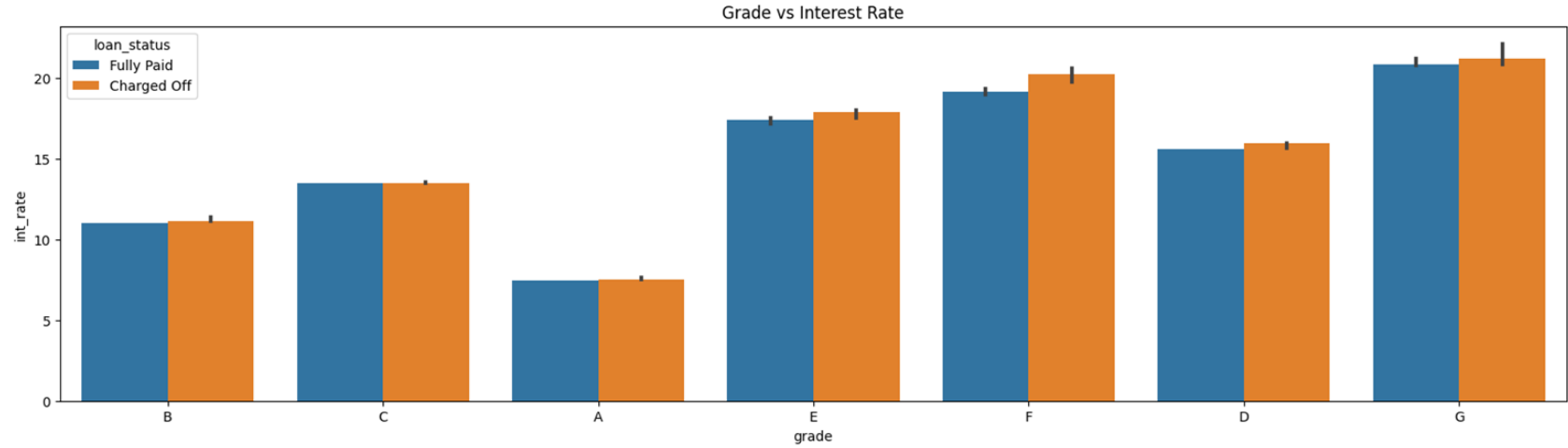
Here we can see that borrowers with 0-2 derogatory records are tend to default the loans and more defaulters are the one who took 60 months tenure loan







- we can clearly see that as the grade goes from A to G, defaulters are increasing
- with this we can say that lower grade people took the loans are more likely to default the loan



Lower the Grades, chances of defaults are more, we can see lower grades like F, G and E are more likely to default

Conclusion

1. We concluded that most of the defaulters are from lower grade borrowers.
2. Borrowers who took loans at higher interest were most likely to default as compared to borrowers selected 36 months tenure
3. Loans taken by small businesses and for debt consolidations are the most defaulters
4. Lending club company should take these pointers in considerations to reduce the number of defaults