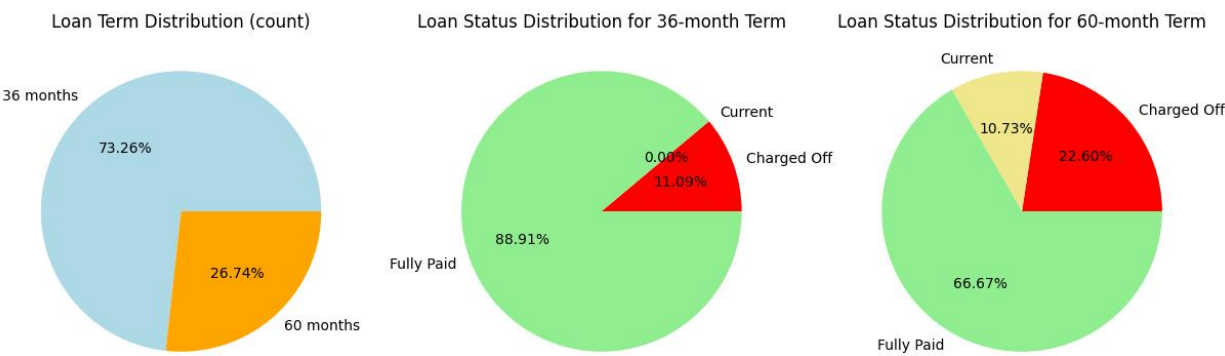


Lending Club EDA

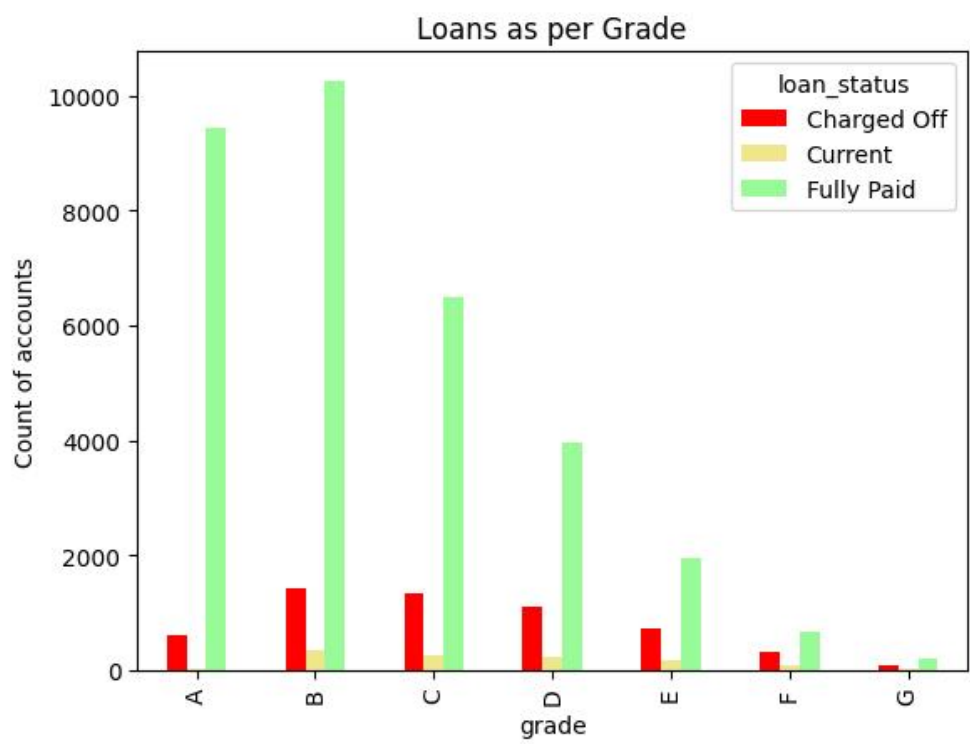
Kaustav Roy

1) Categorical analysis - Defaults across tenure of loan



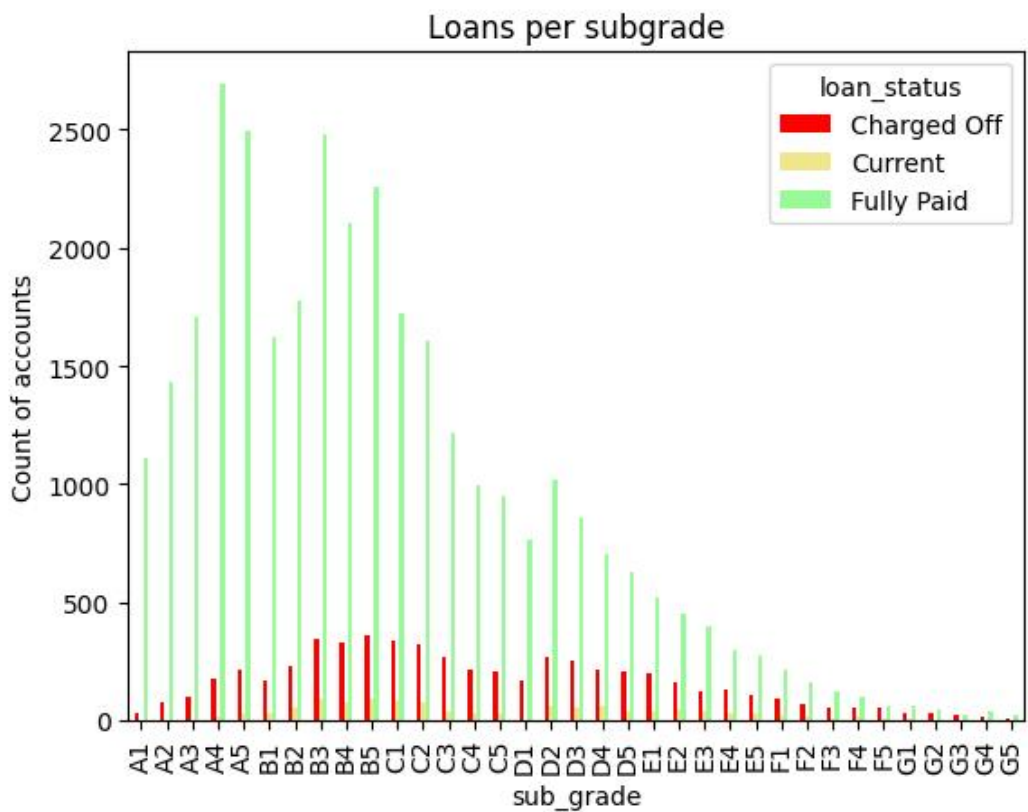
Observation - ‘36 months’ tenure loans are more than ‘60 months’ tenure loans but there are more defaults in ‘60 months’ tenure loans

2) Categorical analysis - Defaults across grade of loan

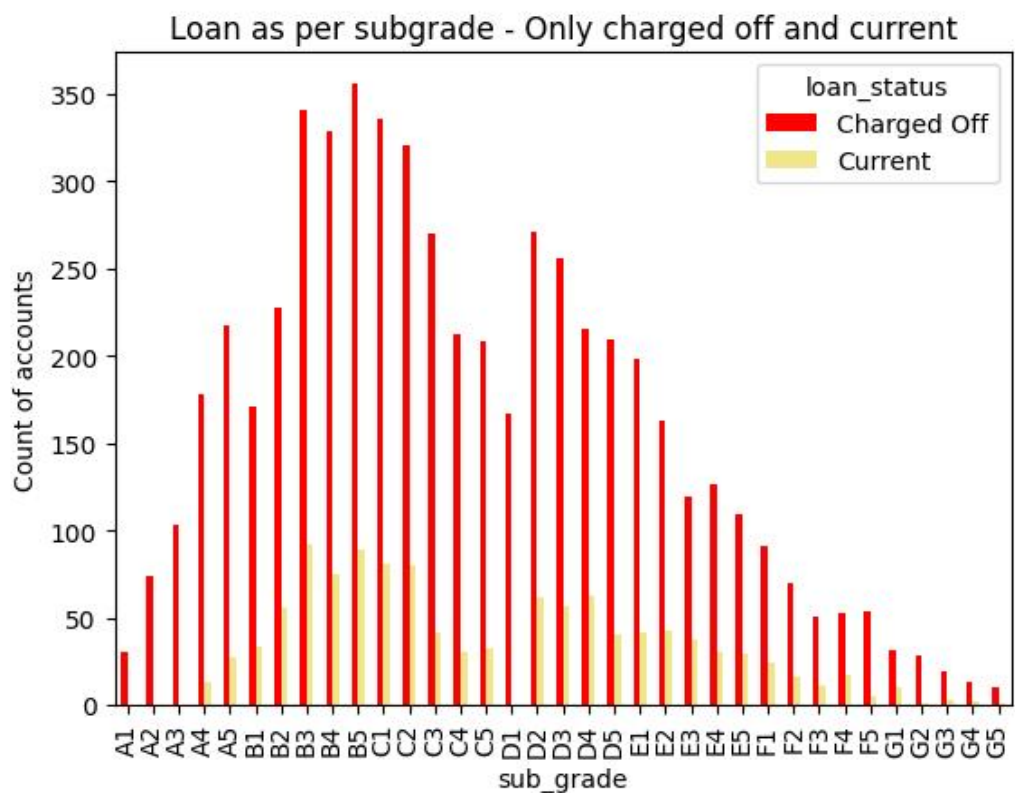


Observation - Across different grades of loans, maximun defaults are in ‘Grade B’. Another observation is that ‘Grade G’ has least defaults.

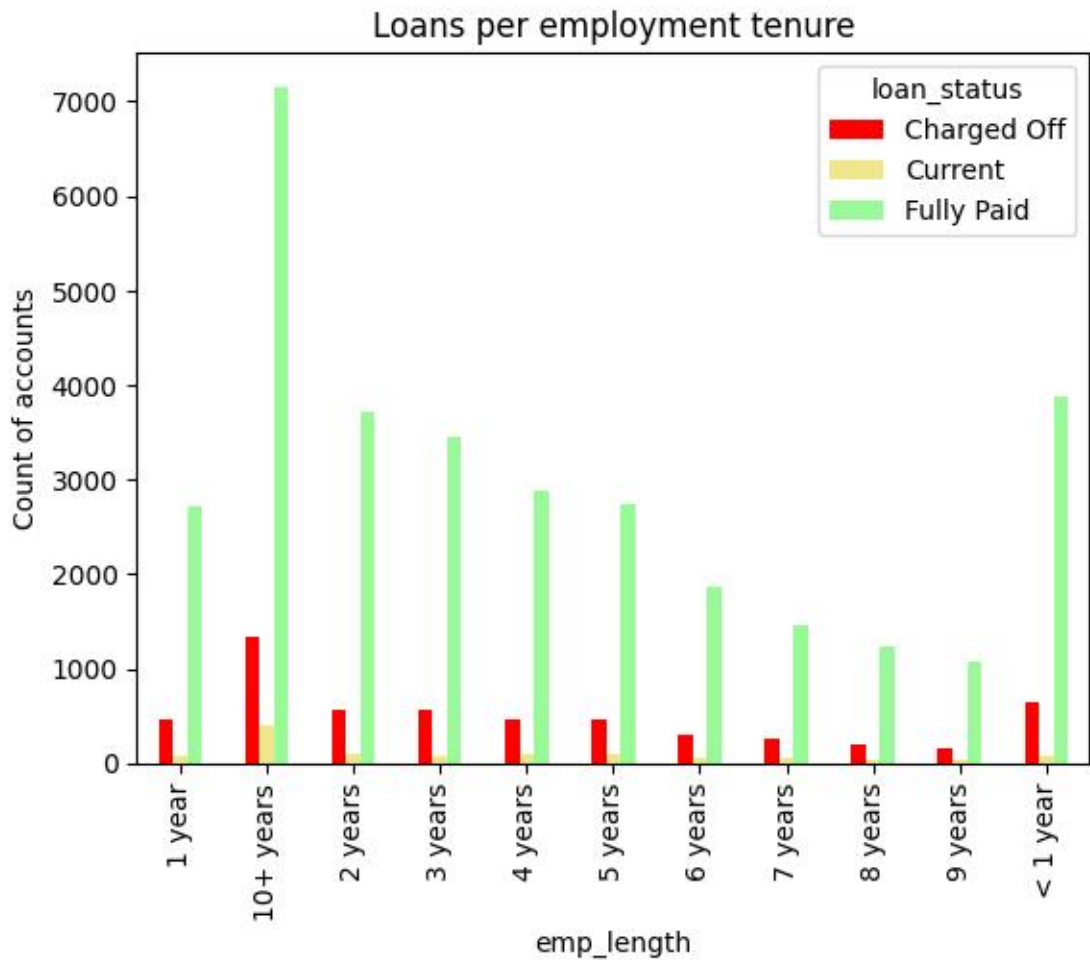
3) Categorical analysis - Defaults across tenure of loan



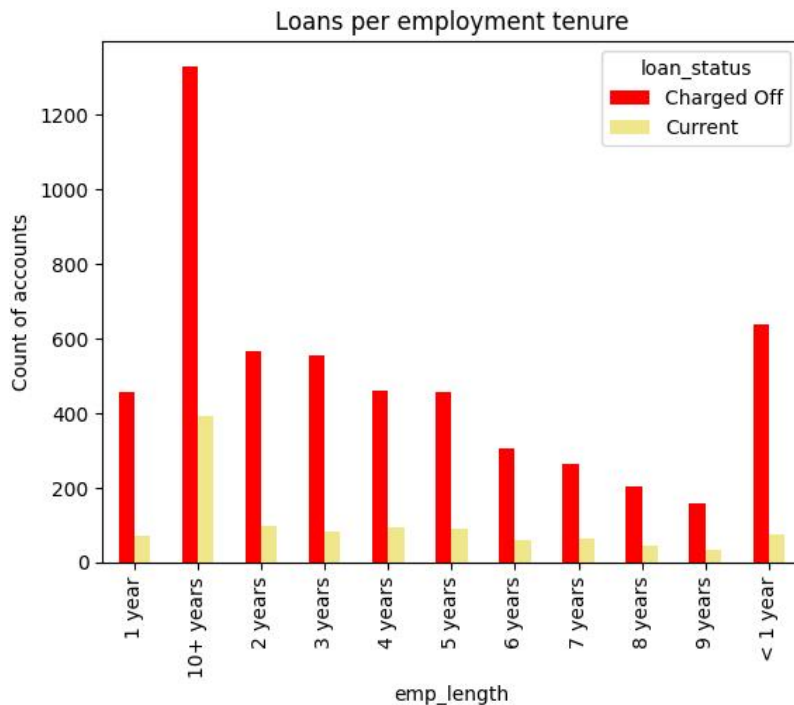
Observation - '36 months' tenure loans are more than '60 months' tenure loans but there are more defaults in '60 months' tenure loans



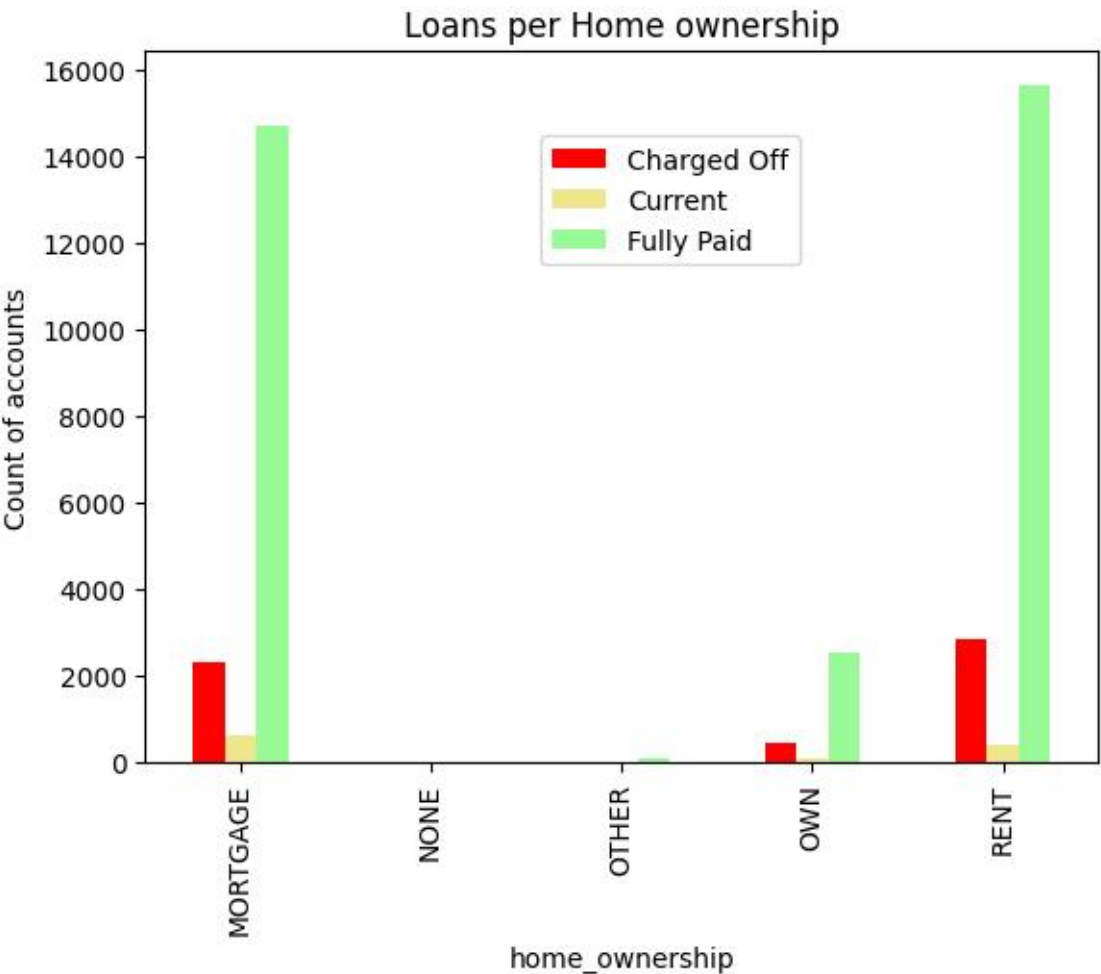
4) Categorical analysis - Defaults across tenure of loan



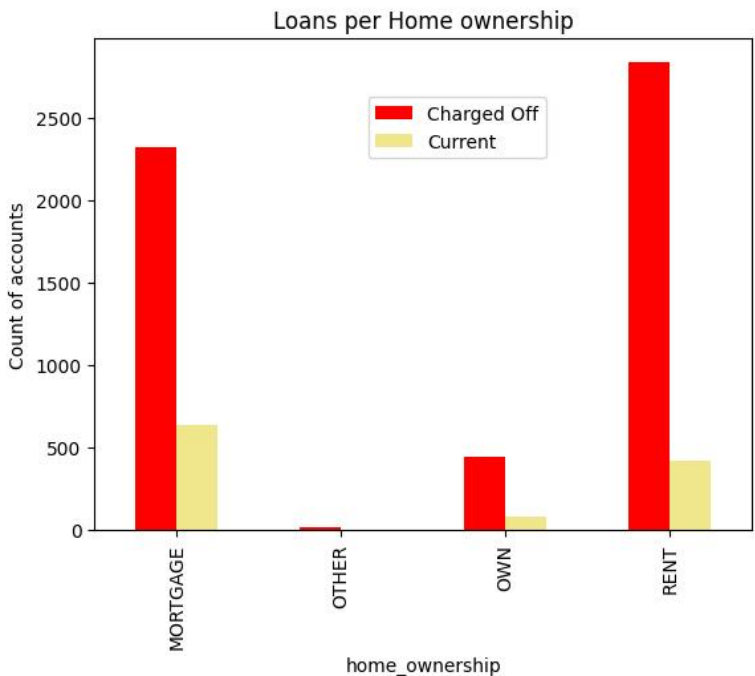
Observation - First observation that we see is - maximum defaults are among 10+ year experience accounts. We also see that the least defaults are among '9 years' accounts.



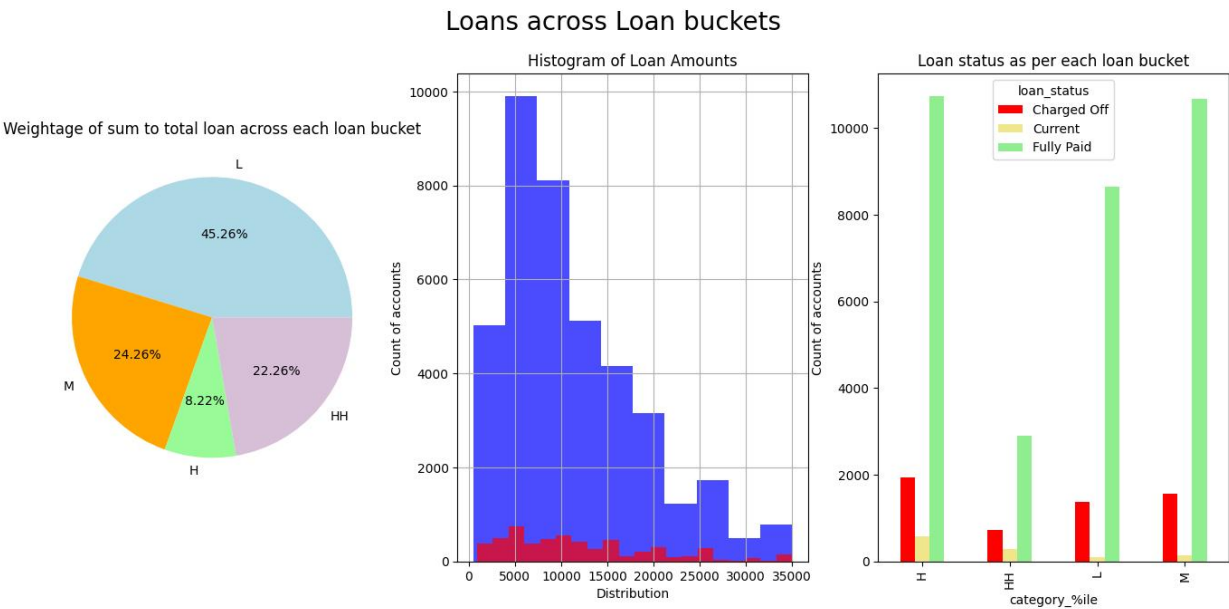
5) Categorical analysis - Defaults across home ownership



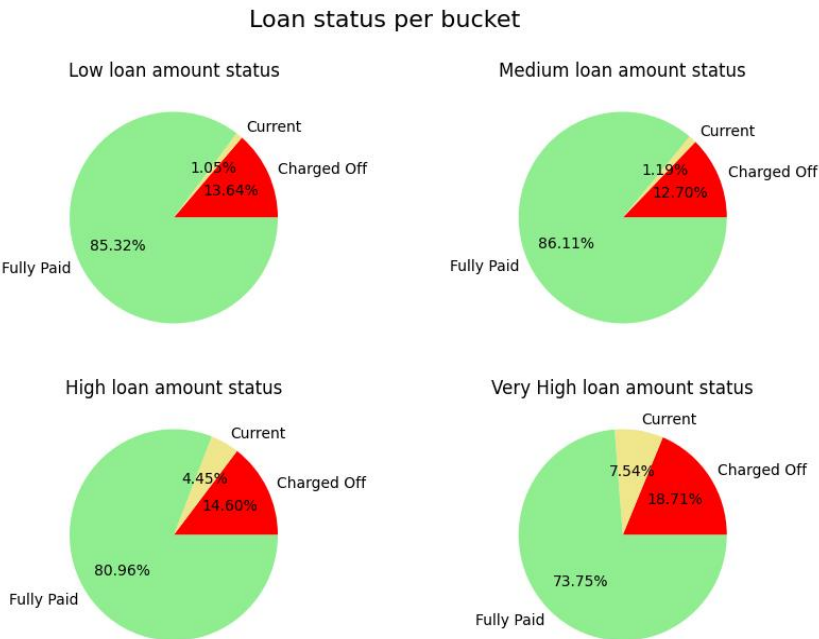
Observation - First observation that we see is - maximum defaults are among accounts who are in 'Rent. We also see that the least deafults are among accounts who own an home



6) Numerical Analysis - Defaults across Loan amount

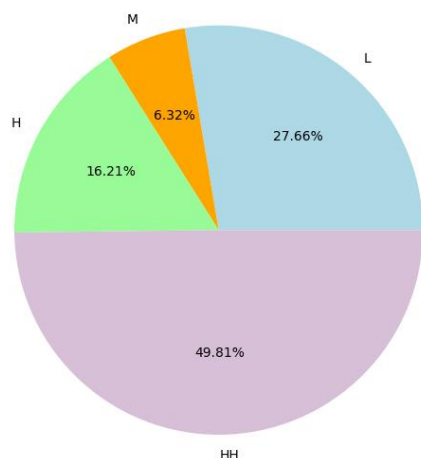


Observation - First observation that we see is - maximum defaults are among accounts who took loan amount between 10000 to 22000

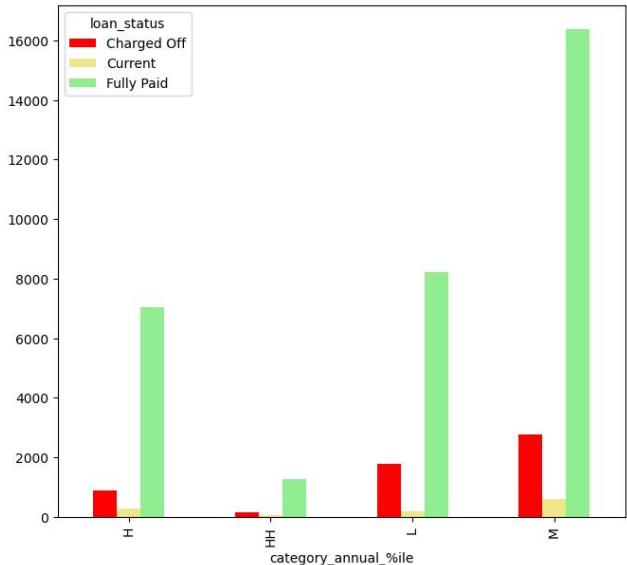


7) Numerical Analysis - Defaults across annual income

Weightage of sum to total loan across each annual income bucket



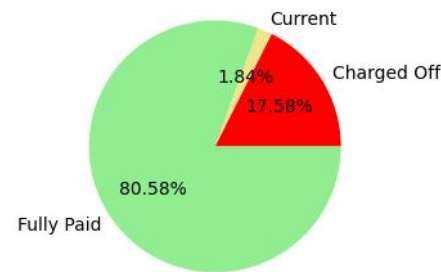
Loan status across income buckets



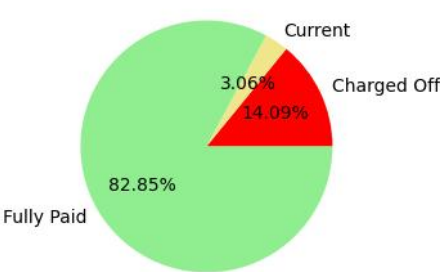
Observation - Among the total loan given out, Accounts having 150000 to 600000 as annual income have the least Defaults.
Accounts having annual income between 41000 to 83000 have little weightage among total loans given, but it shows the maximum defaults

Loan status per annual income bucket

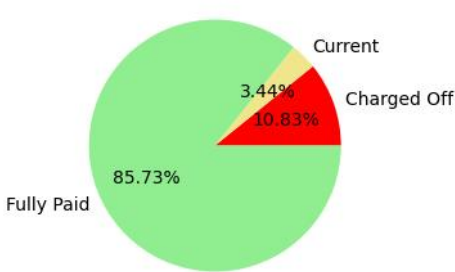
Low account size status



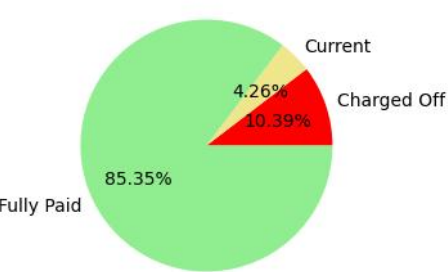
Medium account size status



High account size status

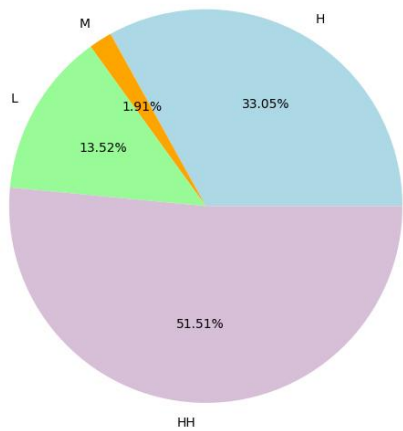


Very High account size status

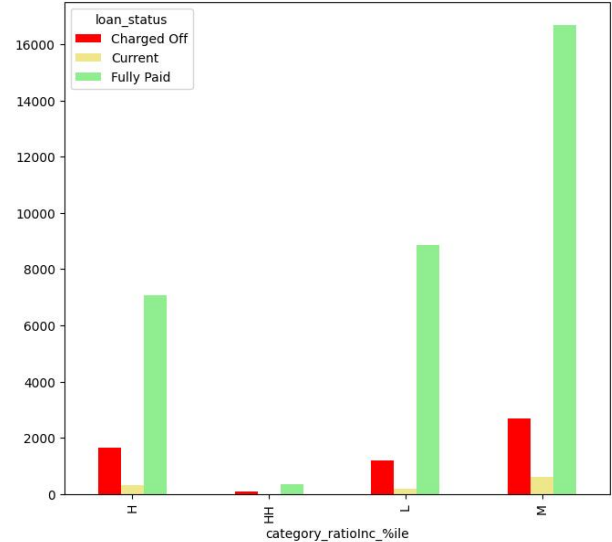


8) Numerical Analysis - Defaults across ratio of income to installment

Weightage of sum to total loan across each installment amount to income ratio bucket



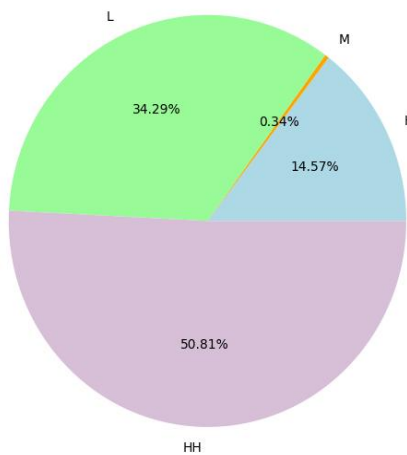
Loan status ratio of installment to annual income buckets



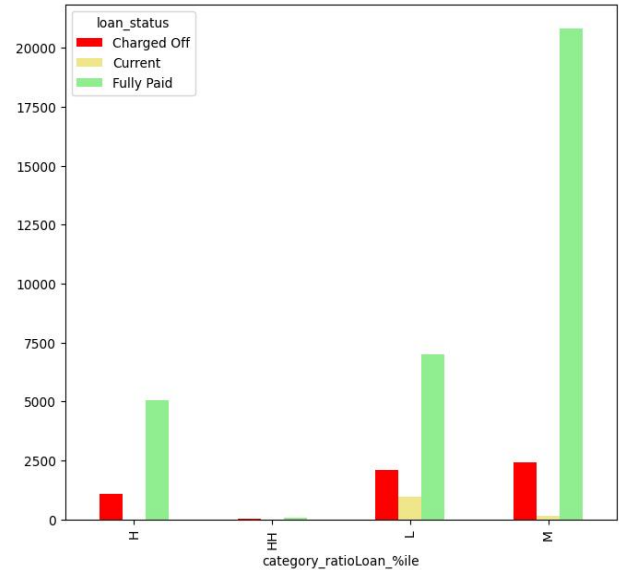
Observation - Among the total loan given out, Accounts having high ratio of installment to income have highest weightage but least defaults. Accounts having medium installment ratio, have little weightage among total loans given, but it shows the maximum defaults

9) Numerical Analysis - Defaults across ratio of income to installment

Weightage of sum to total loan across each installment amount to income ratio bucket



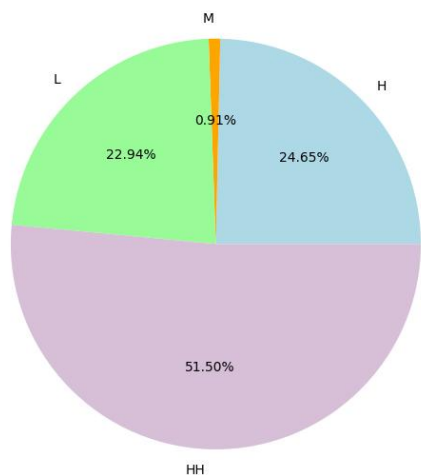
Loan status ratio of installment to annual income buckets



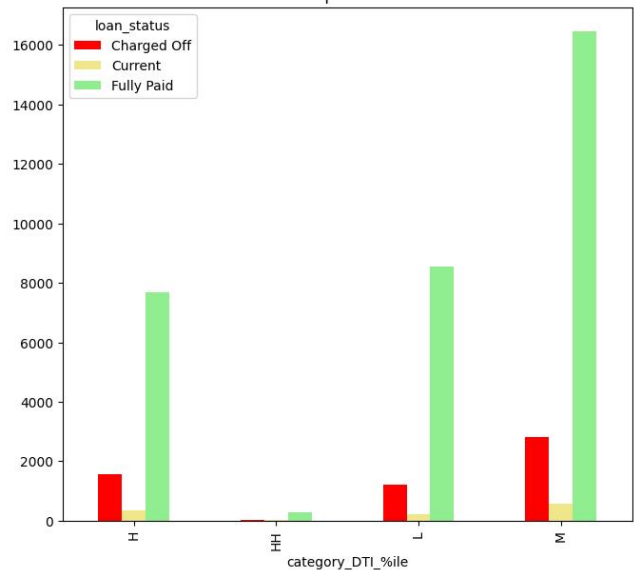
Observation - Among the total loan given out, Accounts having high ratio of installment to loan taken have highest weightage but least defaults. Accounts having medium installment ratio, have little weightage among total loans given, but it shows the maximum defaults.

10) Numerical Analysis - Defaults across DTI

Weightage of sum to total loan across each bucket of DTI



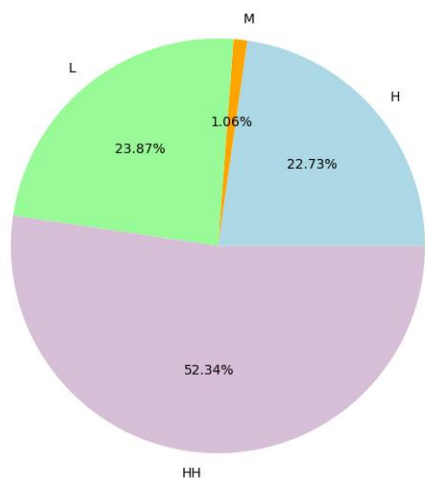
Loan status per bucket of DTI



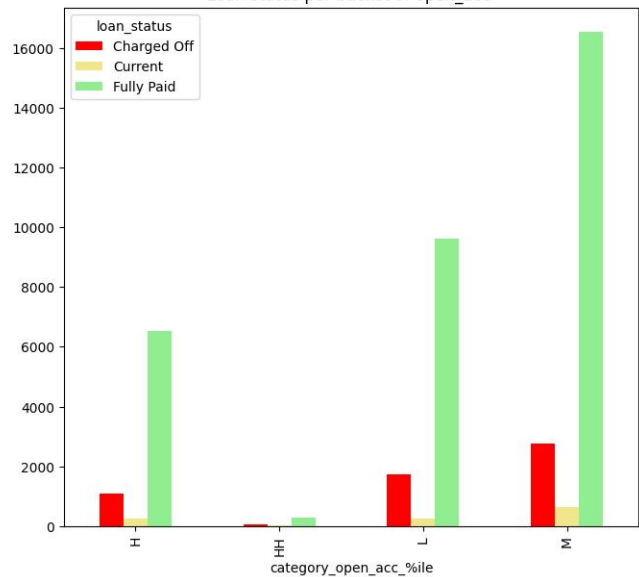
Observation - Among the total loan given out, Accounts having high DTI have highest weightage but least deafults. Accounts having medium DTI, have little weightage among total loans given, but it shows the maximum defaults

11) Numerical Analysis - Defaults across number of open accounts

Weightage of sum to total loan across each bucket of number of open accounts



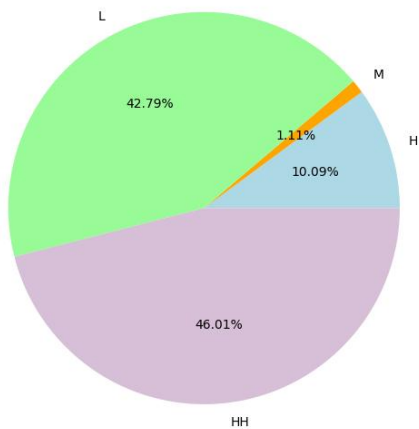
Loan status per bucket of open_acc



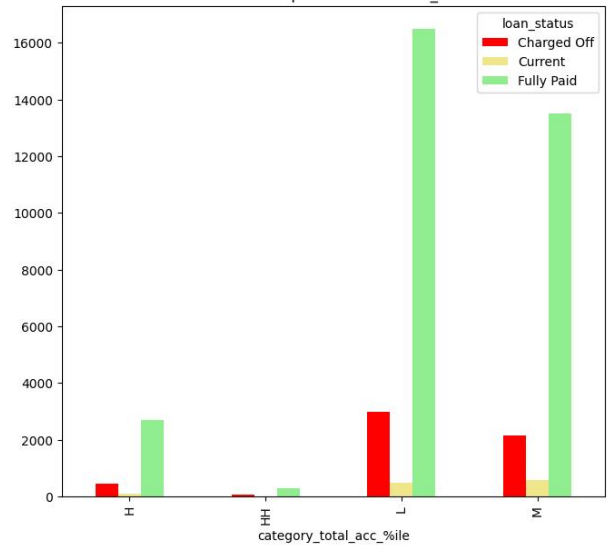
Observation - Among the total loan given out, Accounts having more number of open accounts have highest weightage but least deafults. Accounts having medium installment ratio, have little weightage among total loans given, but it shows the maximum defaults.

12) Numerical Analysis - Defaults across number of total open accounts

Weightage of sum to total loan across each bucket of number of open accounts



Loan status per bucket of total_acc



Observation - Among the total loan given out, Accounts having more number of total open accounts. Accounts having Low number of total open accounts, have significant weightage among total loans given and it shows the maximum defaults

Thank you