GRAMENER CASE STUDY

By:

1. Vipul Agarwal
2. Abhijeet Kumar
3. Satyam Sharma
4. Saurabh Chhabra

PROBLEM STATEMENT

The aim is to identify patterns which indicate if a person is likely to default.

One the basis of the patterns, we can take the decision whether:

1. Loan should be denied
2. Reducing the loan amount
3. Increasing the interest rate

ANALYSIS APPROACH

1. Loan status has 3 outputs:
   - Fully Paid
   - Current
   - Charged off

2. We ran the analysis through multiple variable columns to find its relation with Charged off%

TOP PARAMETERS FOR LOAN DEFAULTER

1. Grade
2. Purpose of Loan
3. Home Ownership
4. Verification Status
5. Income
6. dti

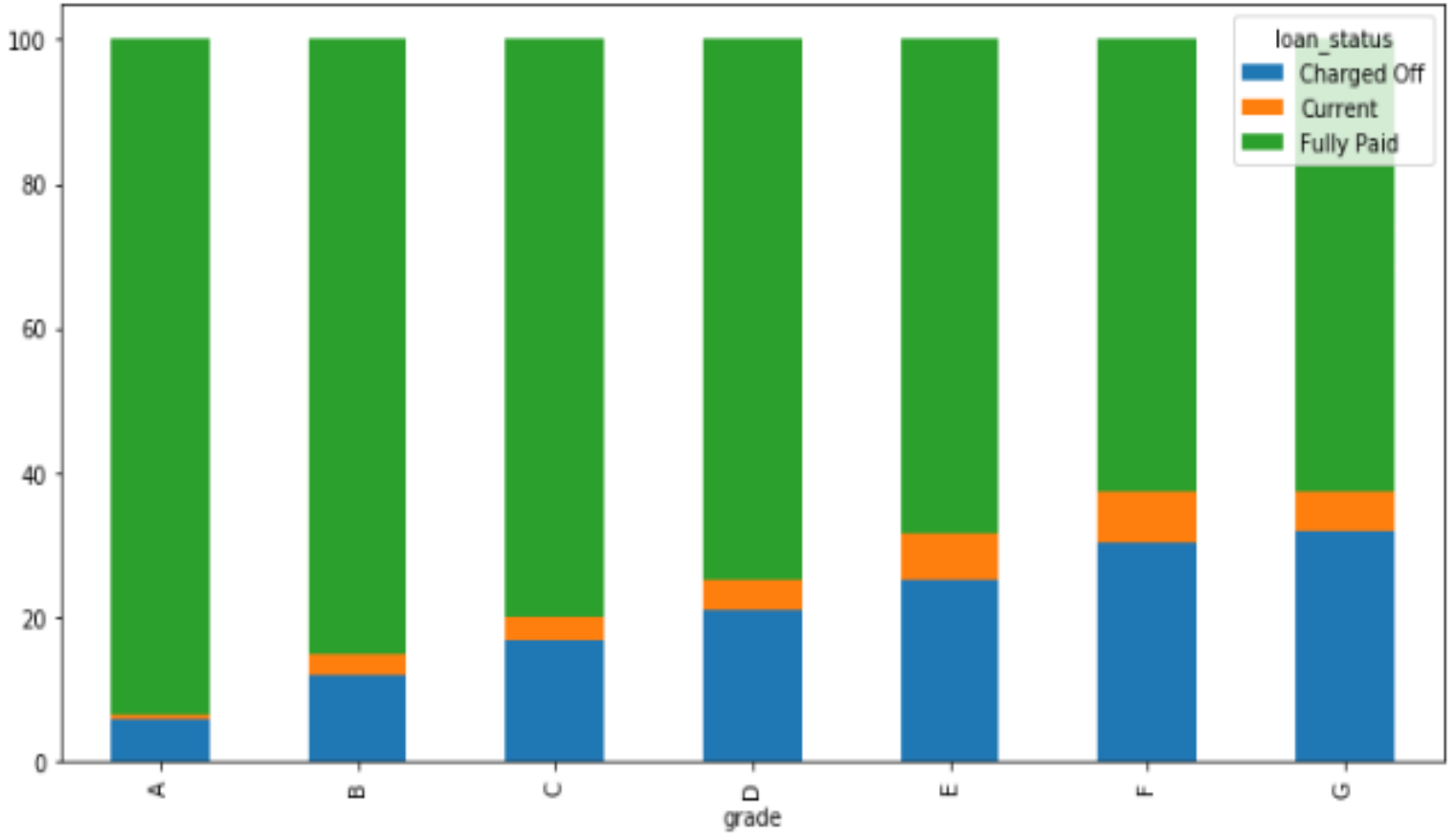
ANALYSIS :

UpGrad

ANALYSIS3: Loan Status Vs Grade

a) The Graph Shows in percentage for the contribution in both charged off & Fully Paid.

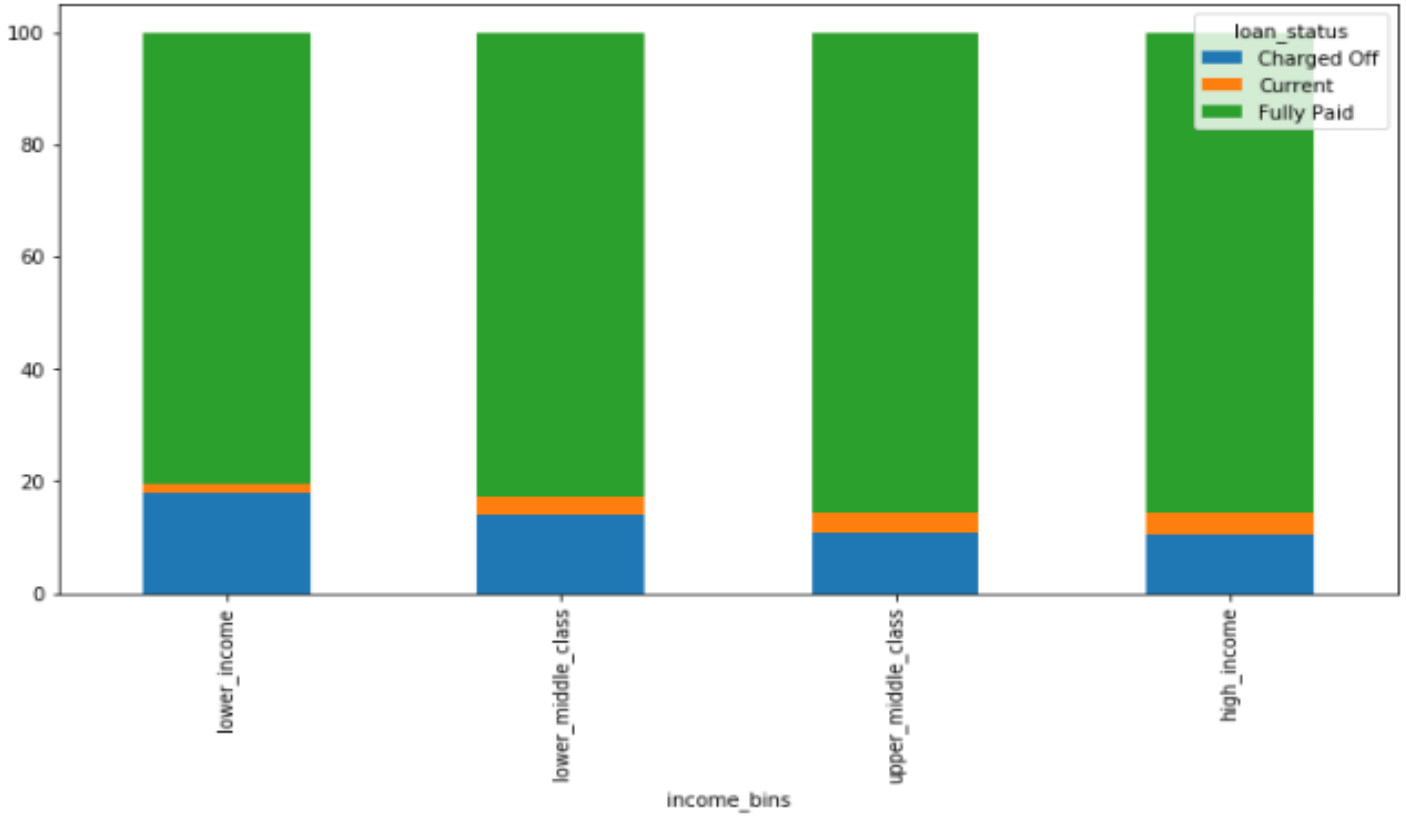
b) The percentage of Charged off is increasing from grades A to G.



ANALYSIS3: Loan Status Vs Annual Income

a) The Graph Shows in percentage for the contribution in both charged off & Fully Paid.

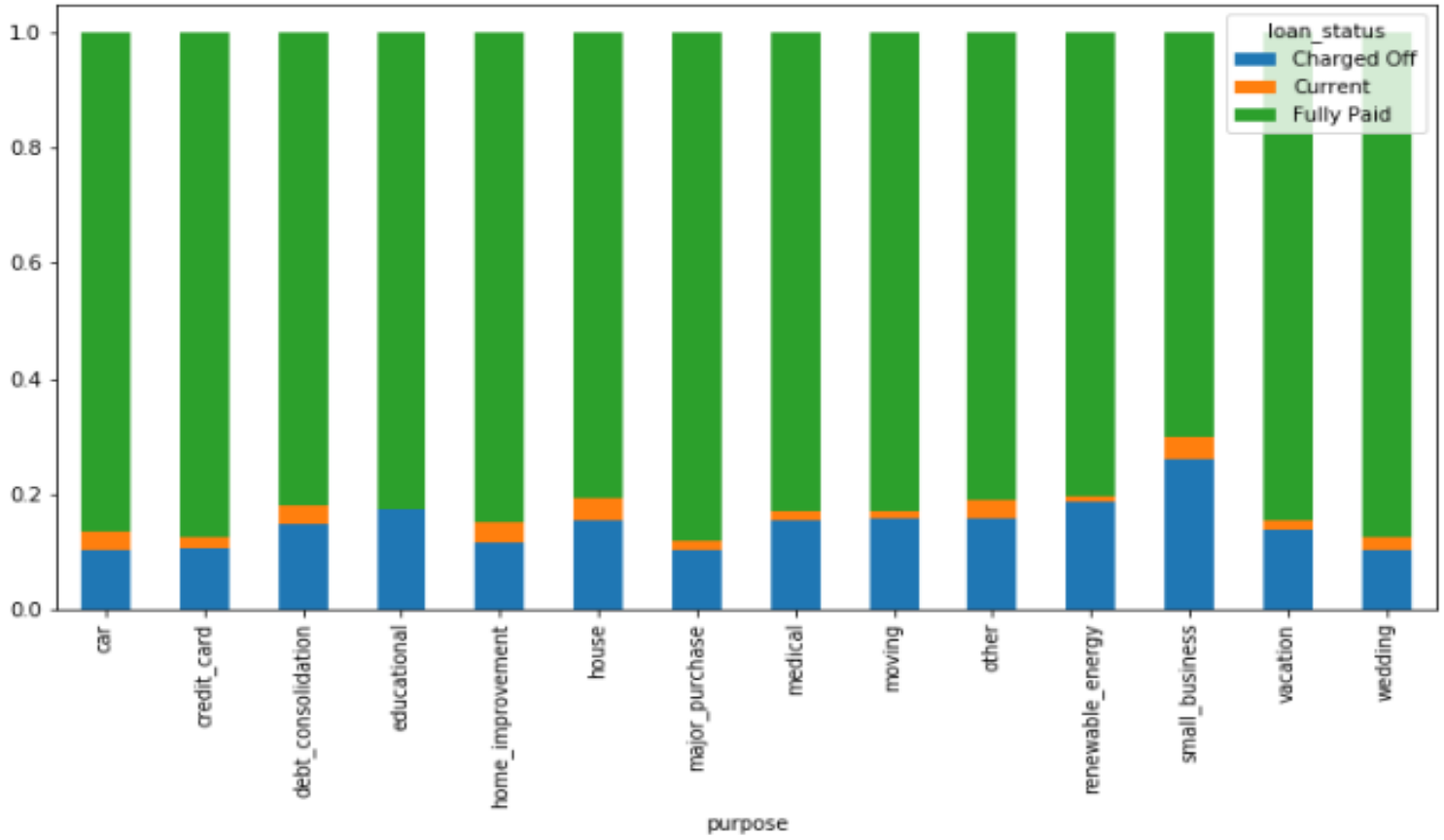
b) The percentage of Charged off is decreasing from income level lower to higher.



ANALYSIS3: Loan Status Vs Purpose

a) The Graph Shows in percentage for the contribution in both charged off & Fully Paid.

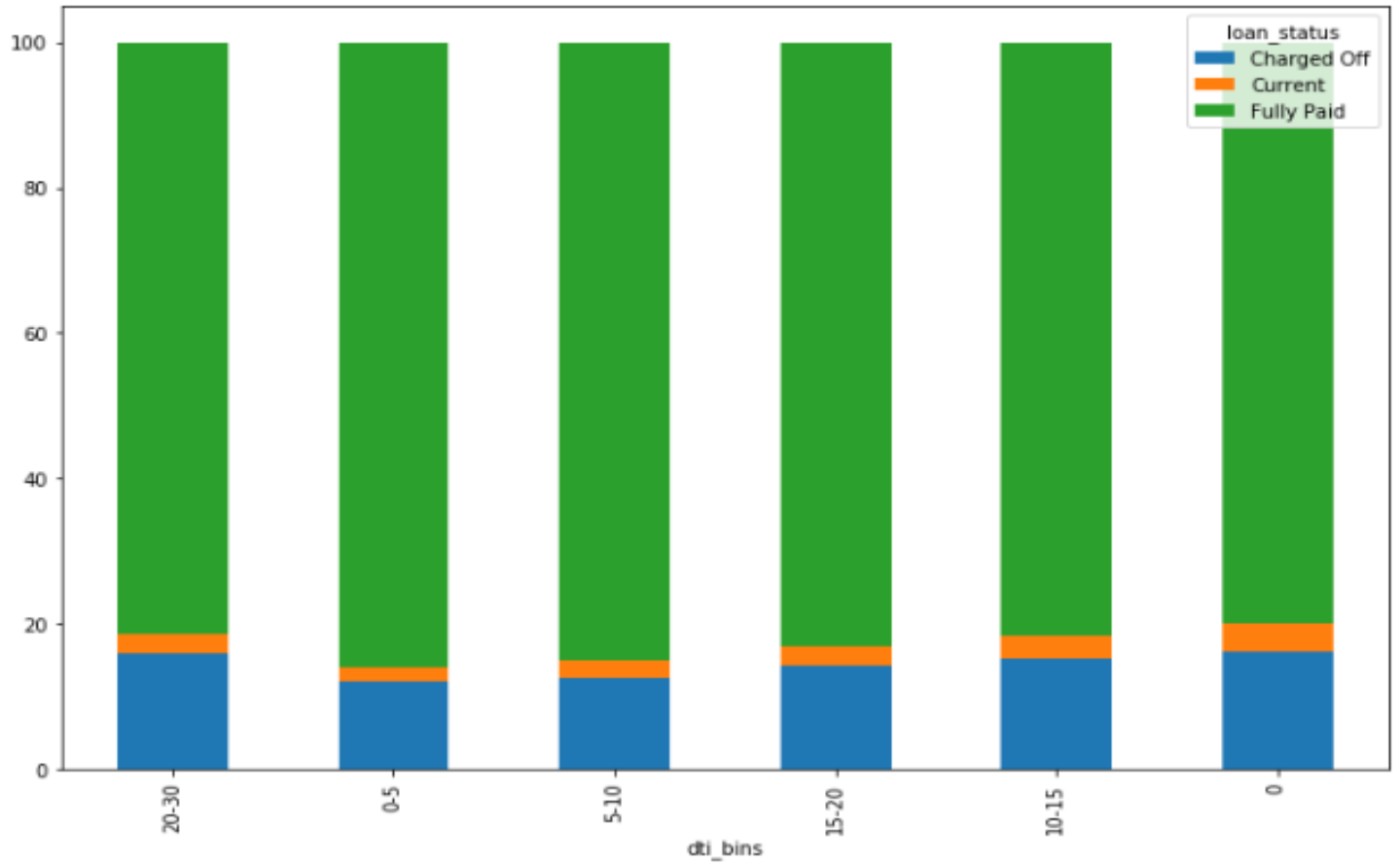
b) The percentage of Charged off is higher in purpose for loan taken small business, house, education, debt consolidation.



ANALYSIS3: Loan Status Vs dti

a) The Graph Shows in percentage for the contribution in both charged off & Fully Paid.

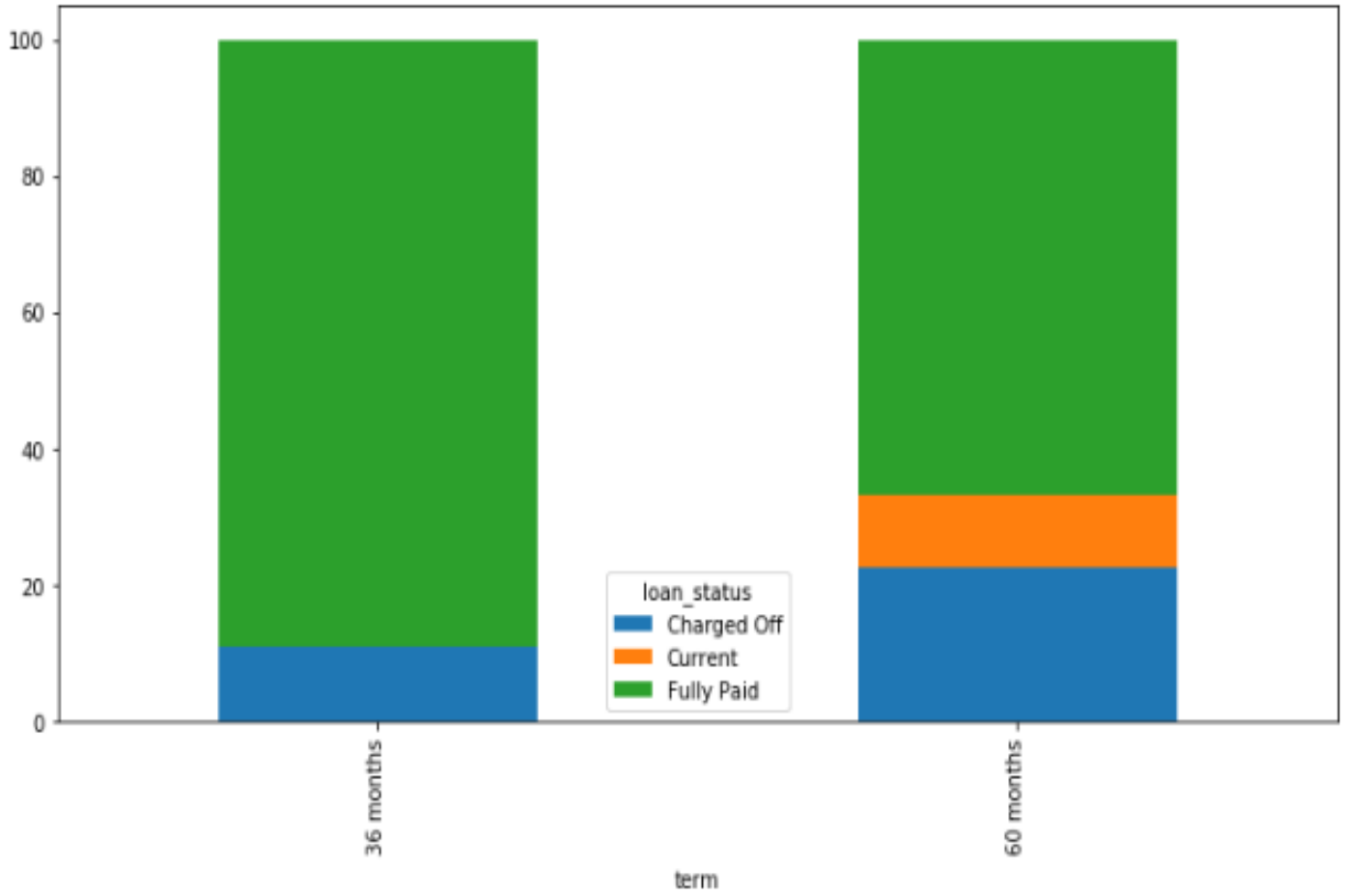
b) The percentage of Charged off is higher in 0 (Zero) and 20-30 bins



ANALYSIS3: Loan Status Vs term

a) The Graph Shows in percentage for the contribution in both charged off & Fully Paid.

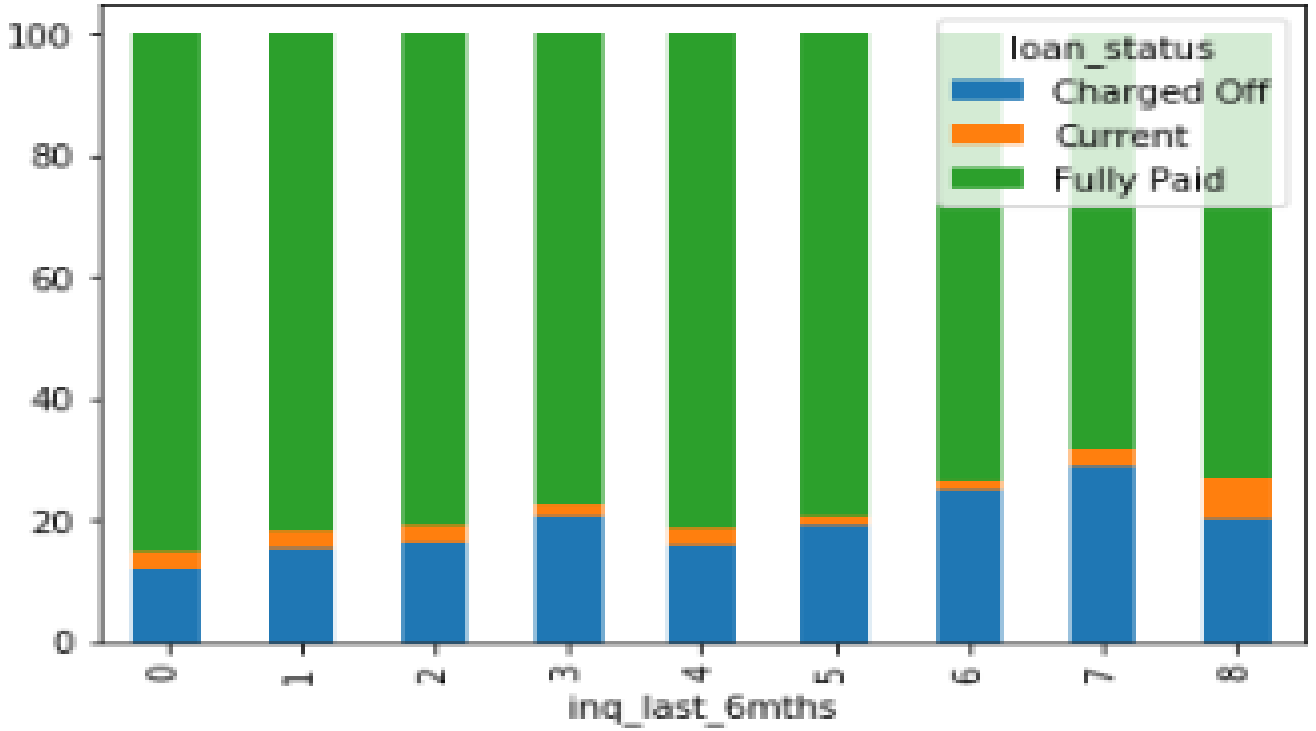
b) The percentage of Charged off is higher in term period 60 months.



ANALYSIS3: Loan Status Vs inquiries last 6 months

a) The Graph Shows in percentage for the contribution in both charged off & Fully Paid.

b) More number of inquiries is in uptrend and hence higher chances of default



RESULTS

a) Loan taken for small business and lower income are leading to maximum defaulters.
b) In grades C to G, the percentage of defaults are more, here grades play an important role in loan disbursal and can be reference from current data to make future decision.
c) Loan charged off is higher in dti bins 0 (Zero) & 20-30.
d) Loan disbursal for longer term should be verified sensibly.
e) More number of inquiries is in uptrend and hence higher chances of default

RECOMMENDATION

a) The process of income verification should be more accurate as it is an important parameter to control default.
b) As we see here that numbers of defaults are higher in verified, we need to investigate the documents correctly before the loan is approved.
c) Target based/last minute loan disbursal should be avoided.