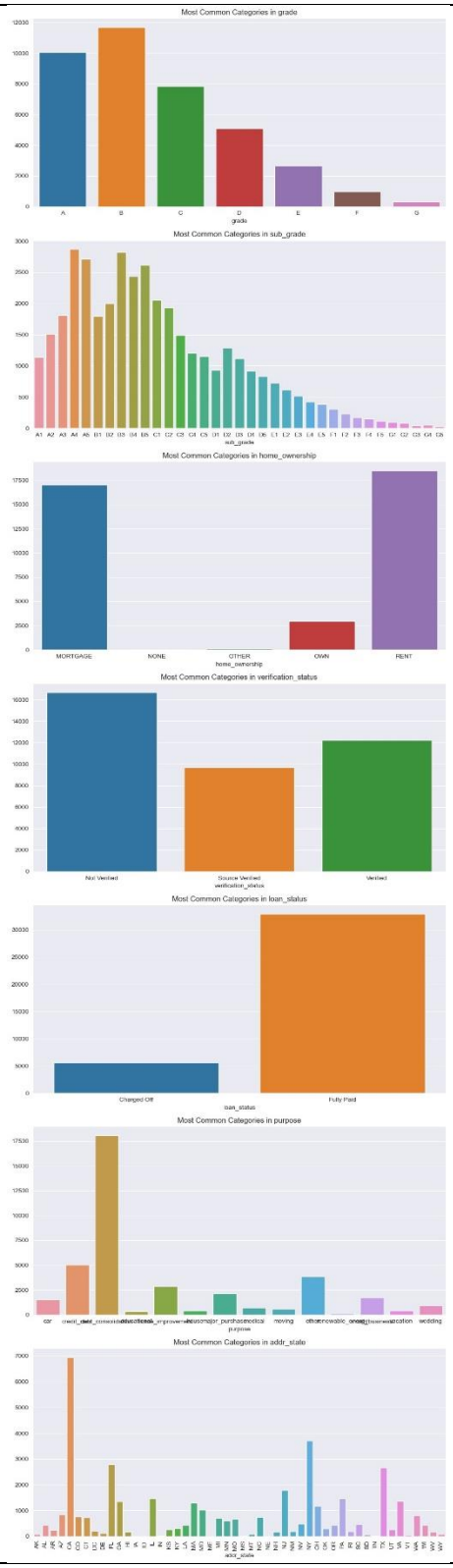
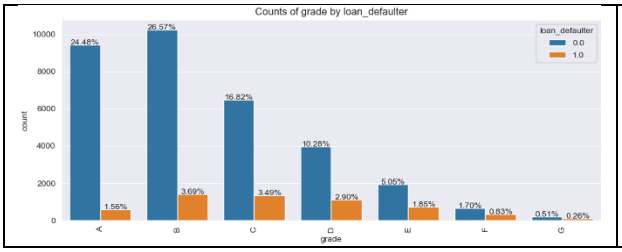
1. Category Columns in BoxPlot

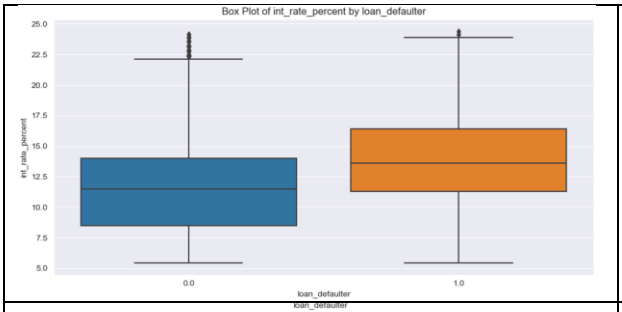
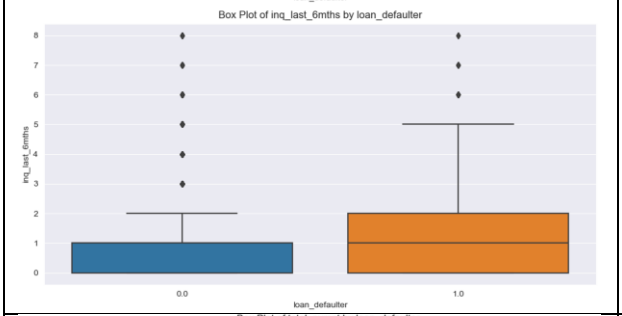
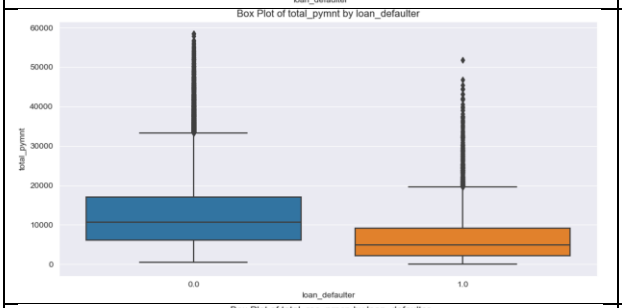
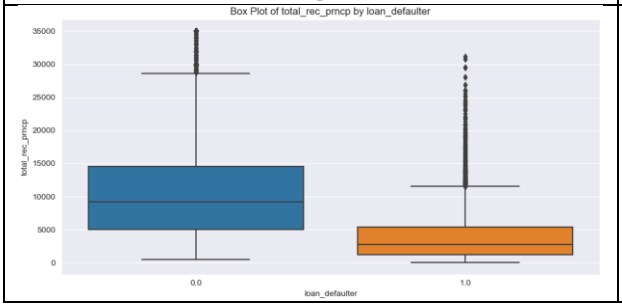


1. Very less Loan applicants in below:
    a. Grade F and G
    b. OWN house
2. A lot more Loan applicants are in below:
    a. debt_consolidation
    b. CA

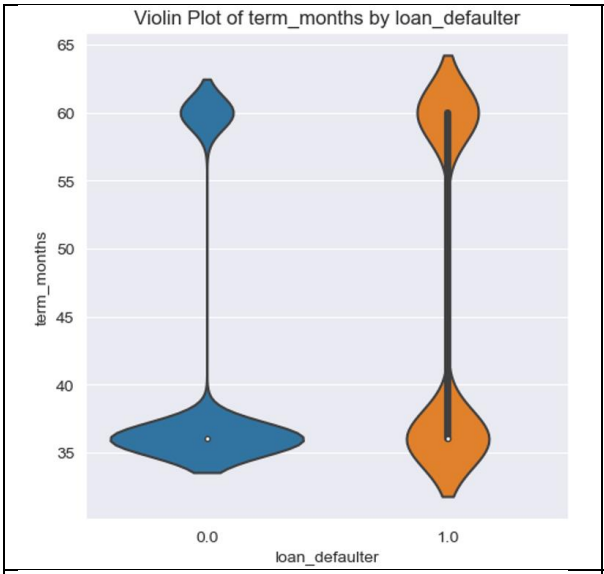
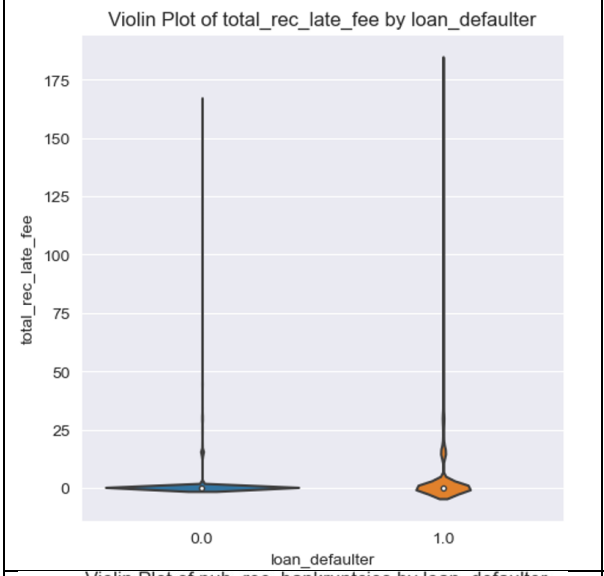
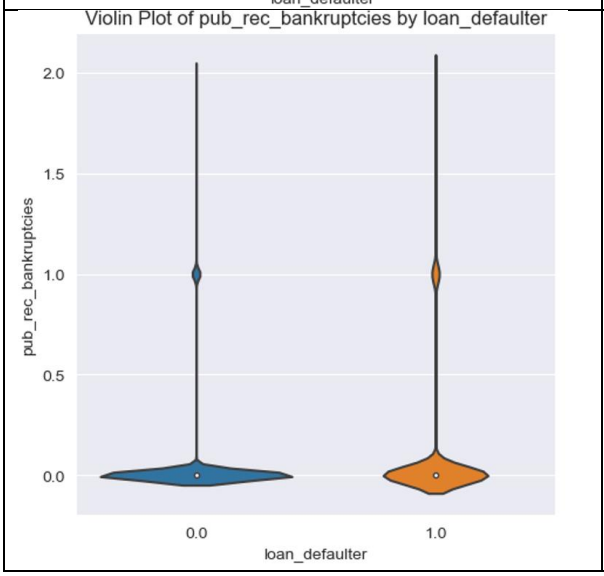
2. CountPlot for Categorical Columns versus Loan Defaulters

	1. As the Grade towards D,E,F,G the percentage of having a defaulter is higher

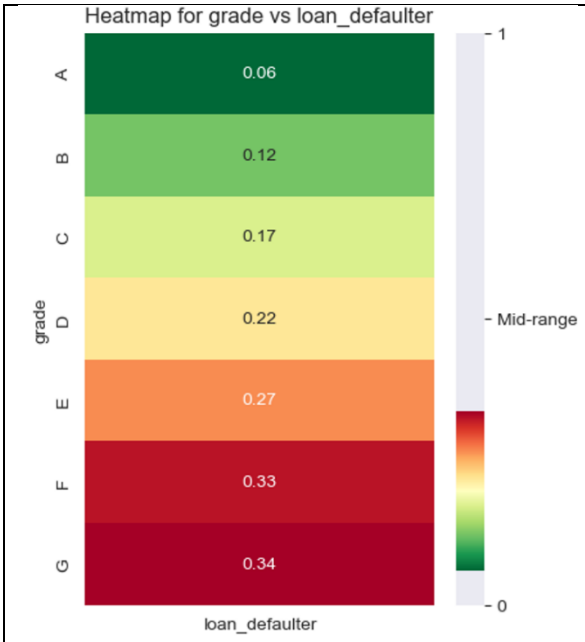
3. BoxPlot for Numerical columns versus Loan Defaulter

	1. Higher Interest Rate has higher defaulter. esp., above 12.5%
	2. Higher the enquiries on the credit status of the applicant, higher the chances of default
	3. After loan issuance, higher the loan payment is done, lower are the chances of being default
	4. After loan issuance, higher the principal payment is done, lower are the chances of being default

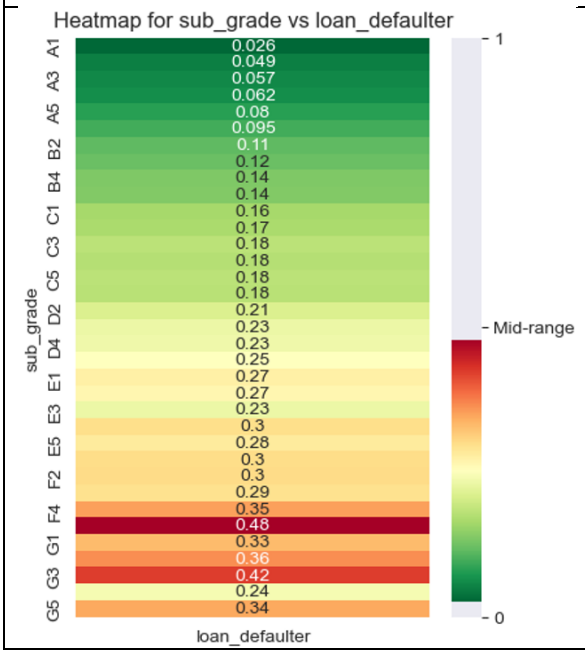
4. Violin Plot for Numerical Columns versus Loan Defaulter:

	1. There are more applicants at term_months around 35 months to be not Defaulted and have Fully Paid
	2. Lower the total_rec_late_fee higher the chances are to Fully Pay the loan. So having lesser recovery late fees would help in having the loans paid fully
	3. Lower the pub_rec_bankruptcies higher the chances are to Fully Pay the loan. So the time pub_rec_bankruptcies are more its an indication of being a defaulter

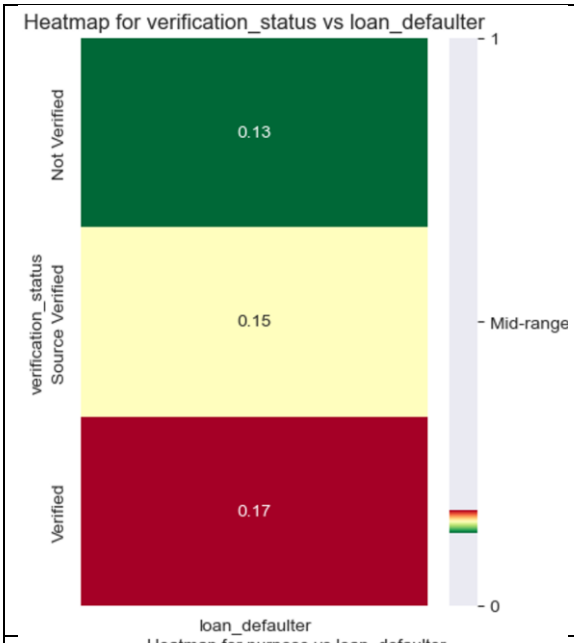
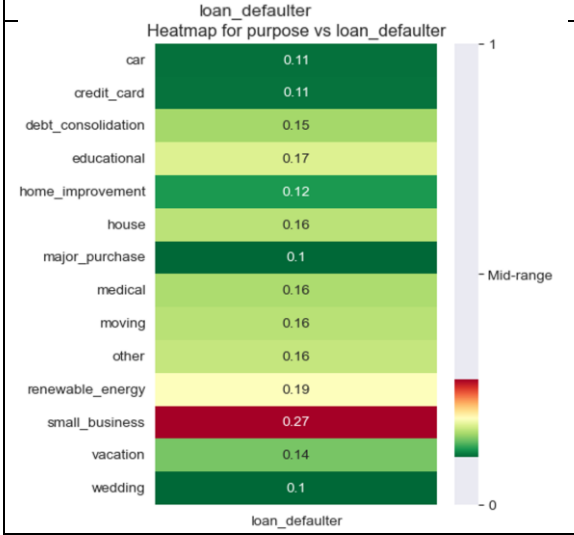
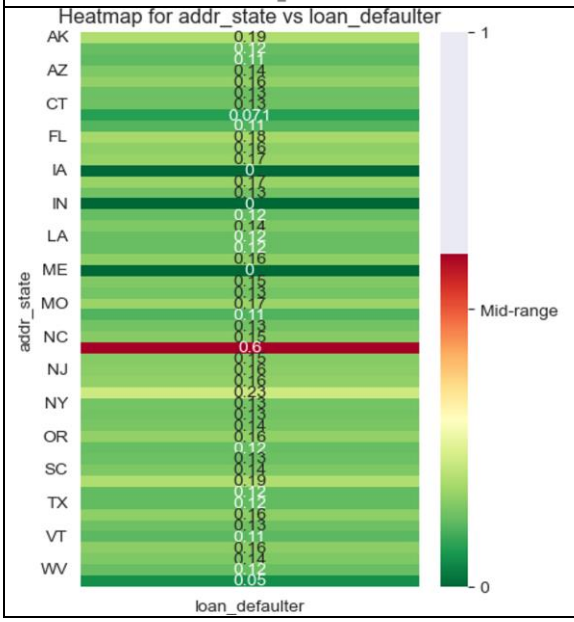
5. Categorical Columns – Heatmap versus Loan Defaulter



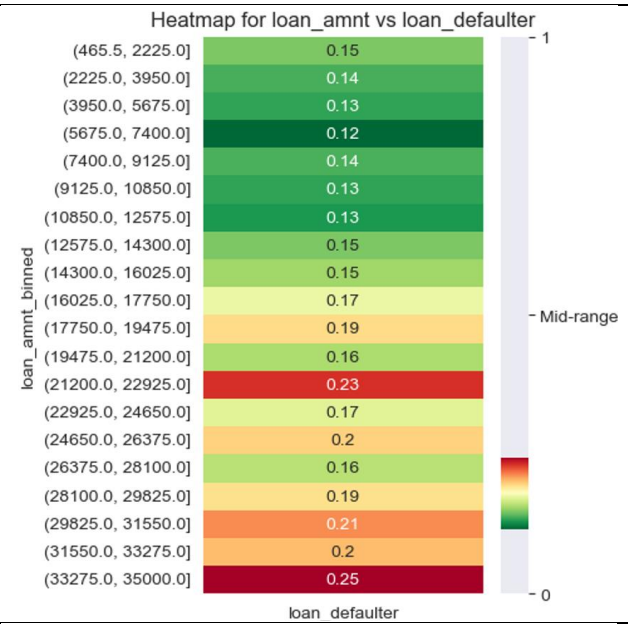
1. It again clearly shows as the Grades move towards D,E,F,G the chances of being a default is higher



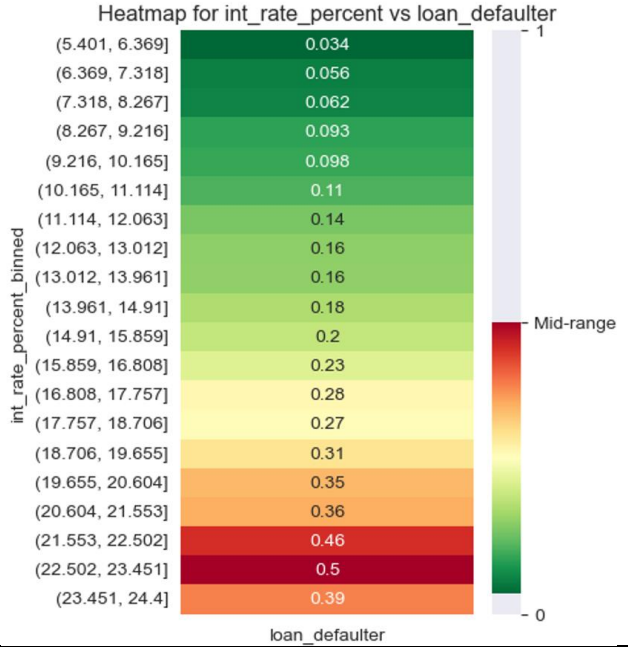
2. Grades towards E, F, G have higher chances of being default. Also, F4 and G3 have the highest chances of being default

	3. Also, if the verification_status is Verified there are chances of being default. So this process need to be revisited
	4. For purpose of Small Business there are higher chances of having defaulter.
	5. For addr_state = NE (0.6 value in heatmap) , there are higher chances of having the loan defaulted

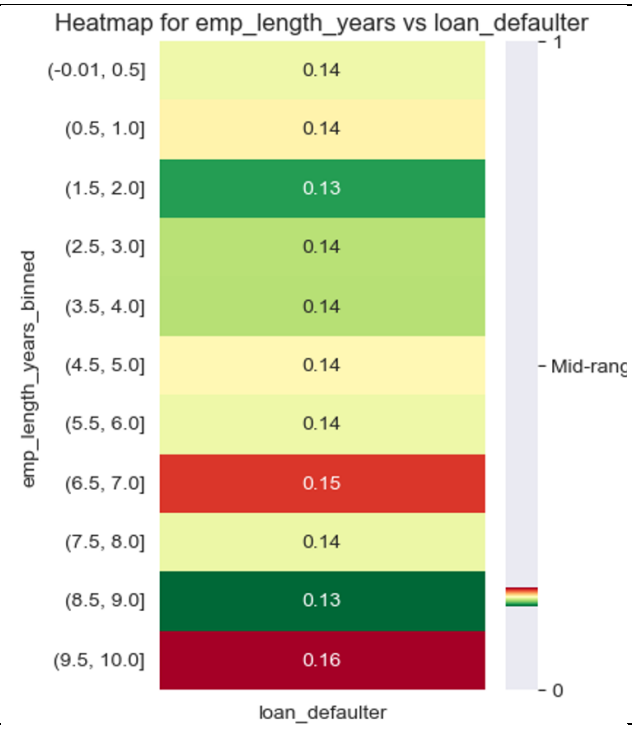
6. Numerical-Columns-Heatmap versus Loan Defaulter



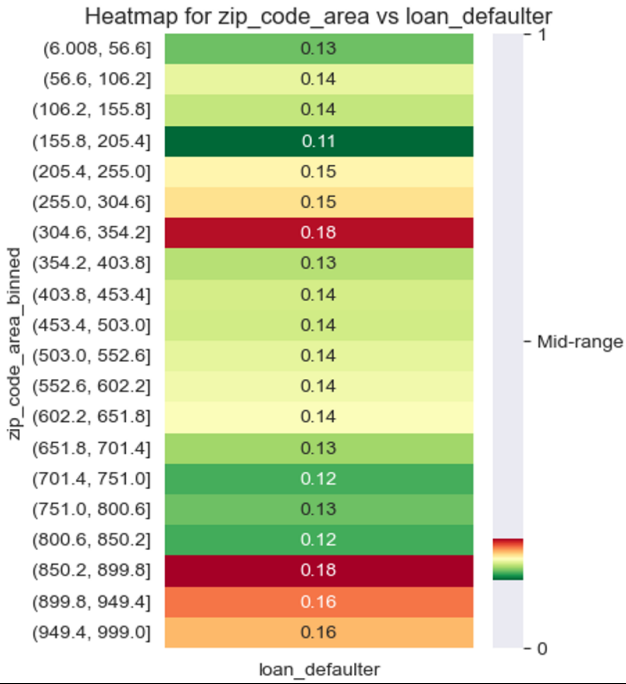
1. For Loan Amount in higher ranges, the defaulter chances are higher. Esp between 21k-23k & 29k-35k



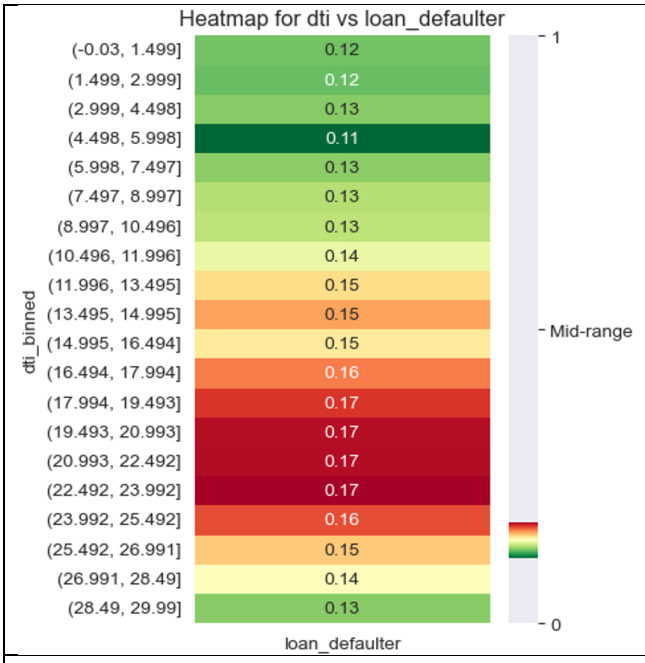
2. With higher interest rates, the higher are the chances of Default. Esp., for 21%-23.5% the chances of Default are 50%



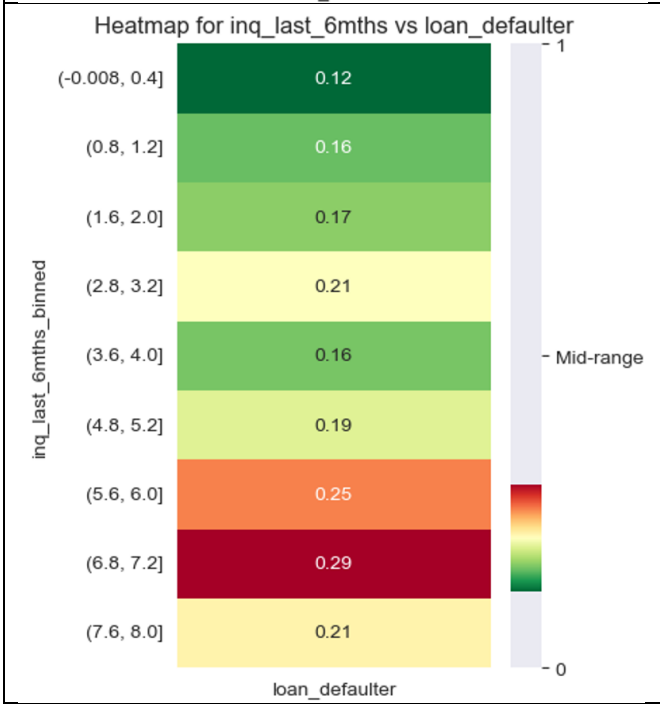
3. For emp_length in years esp., for the range between 6.5-7 and 9.5-10 years have high chances of default



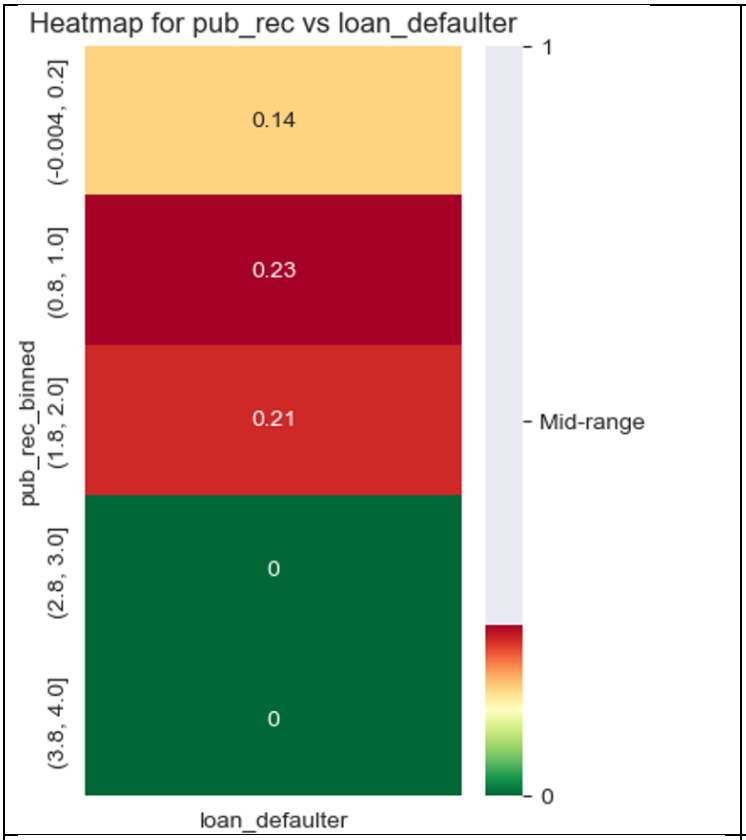
4. For the zip_code area 304xx-350xx and 850xx-999xx , the chances of default are higher



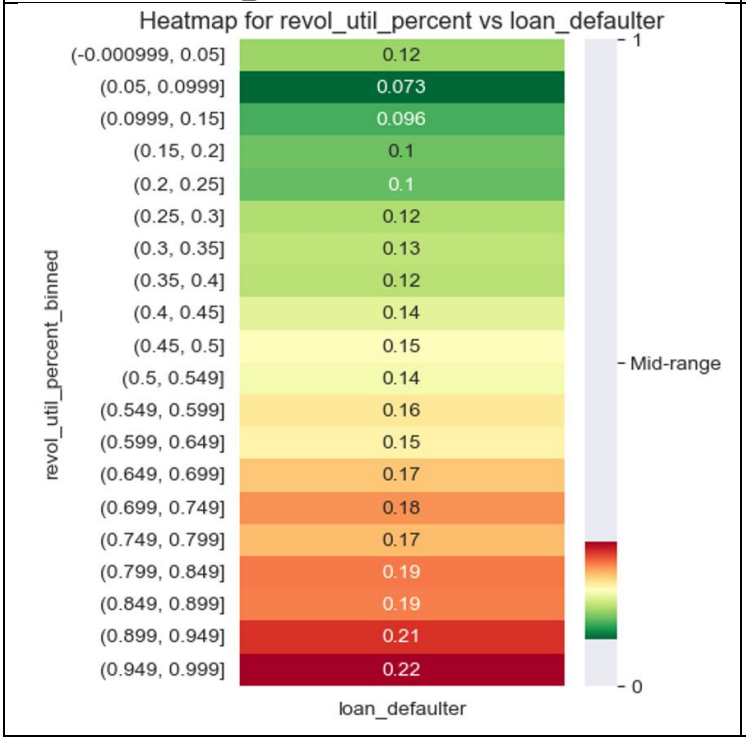
5. For Debt-to-Income ratios of 11-26, there are chances of loan default.



6. For more inquiries in credit status of the applicant in last 6 months have higher chances of default



7. With number of derogatory public records between 0-2 , there are higher chances of default. Even in case of higher than 2, it seem the value is 0. So for any number of pub_rec there needs to be proper investigation for loan approval



8. With higher percent of the credit used by the applicant among the total available credit to him from various sources, the higher chances of default. Esp., if the revol_util_percent is higher than 0.16 then more chance for default