

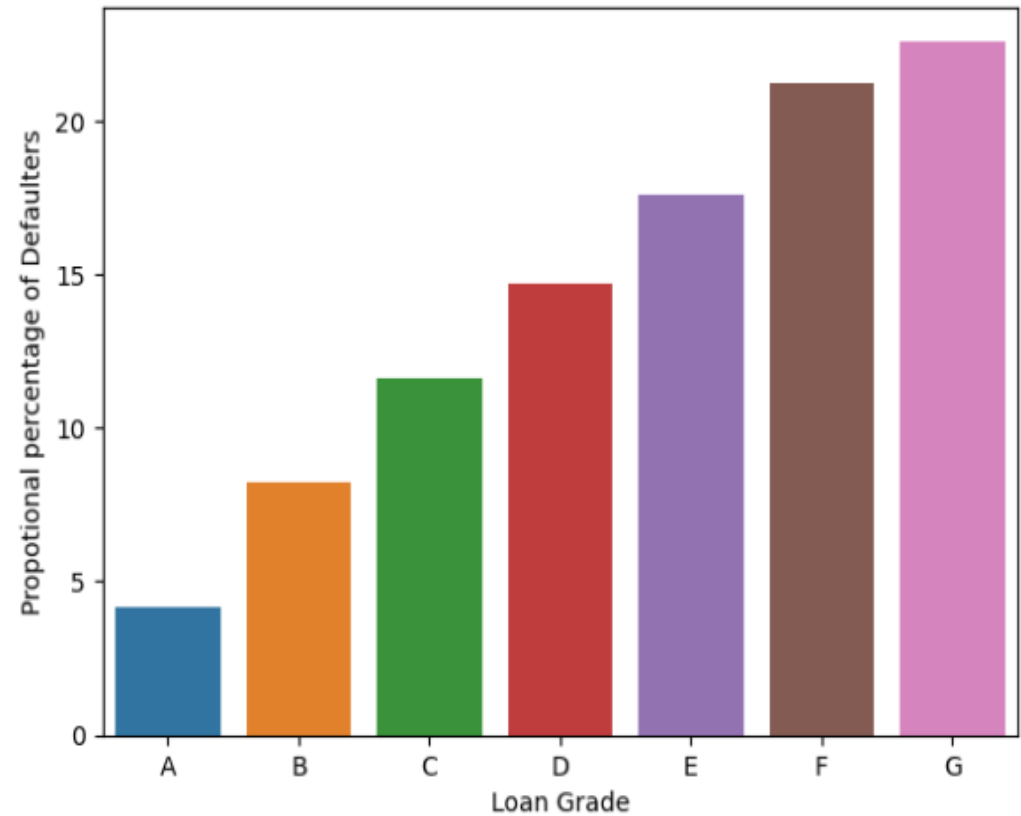
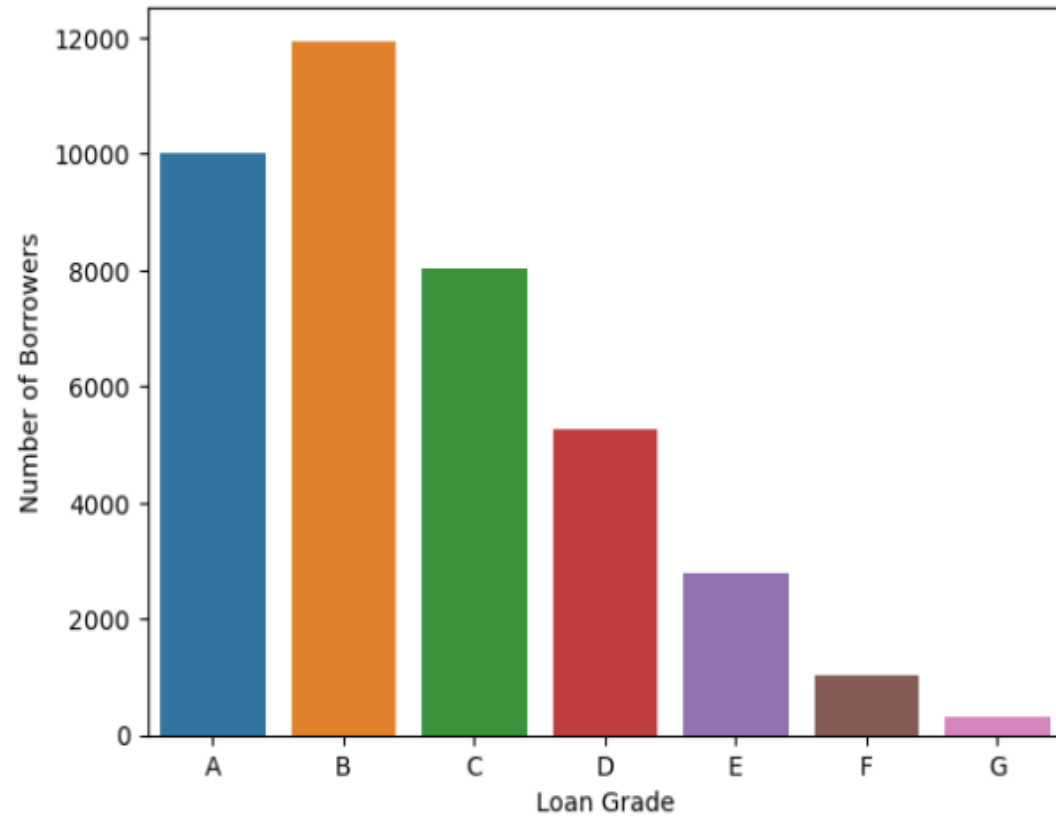
# Lending Club Case Study

EDA

By Krishna Chaitanya Bhavanibhatla

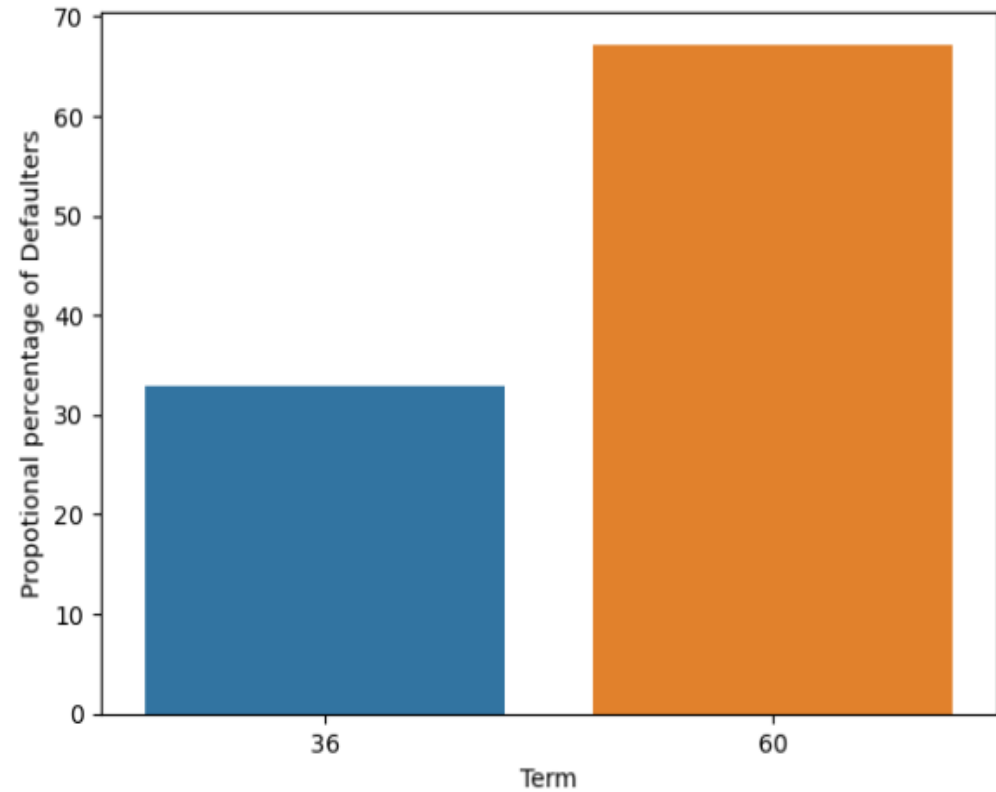
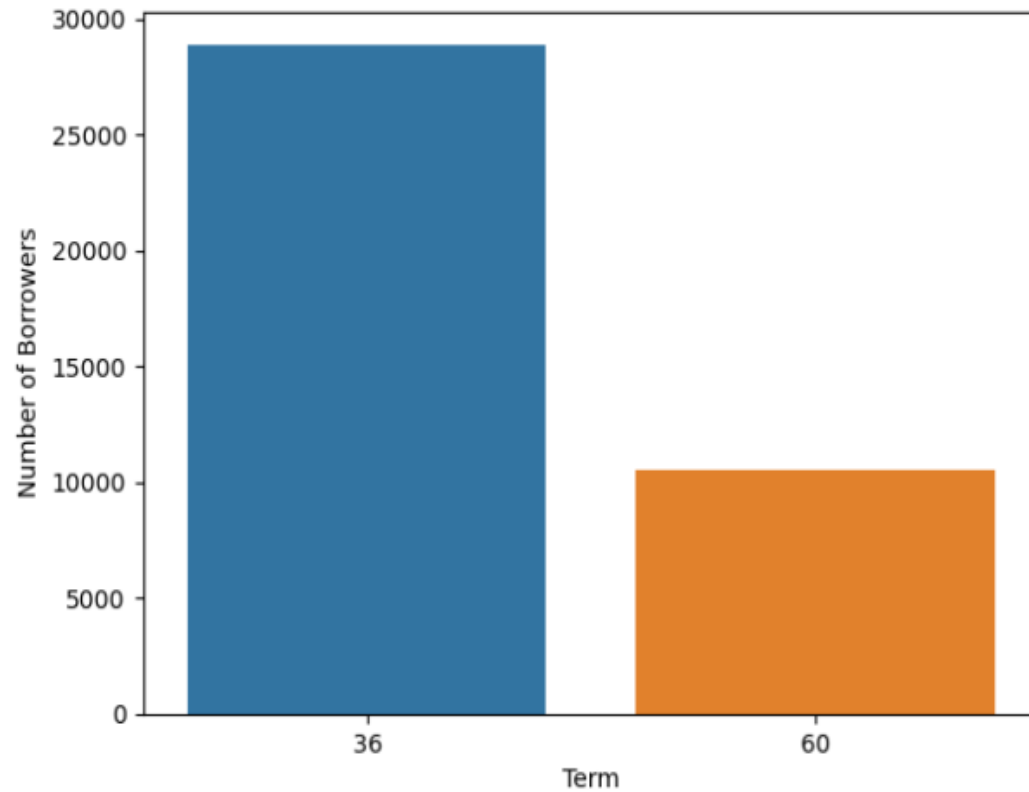
# Analysis

- Grade



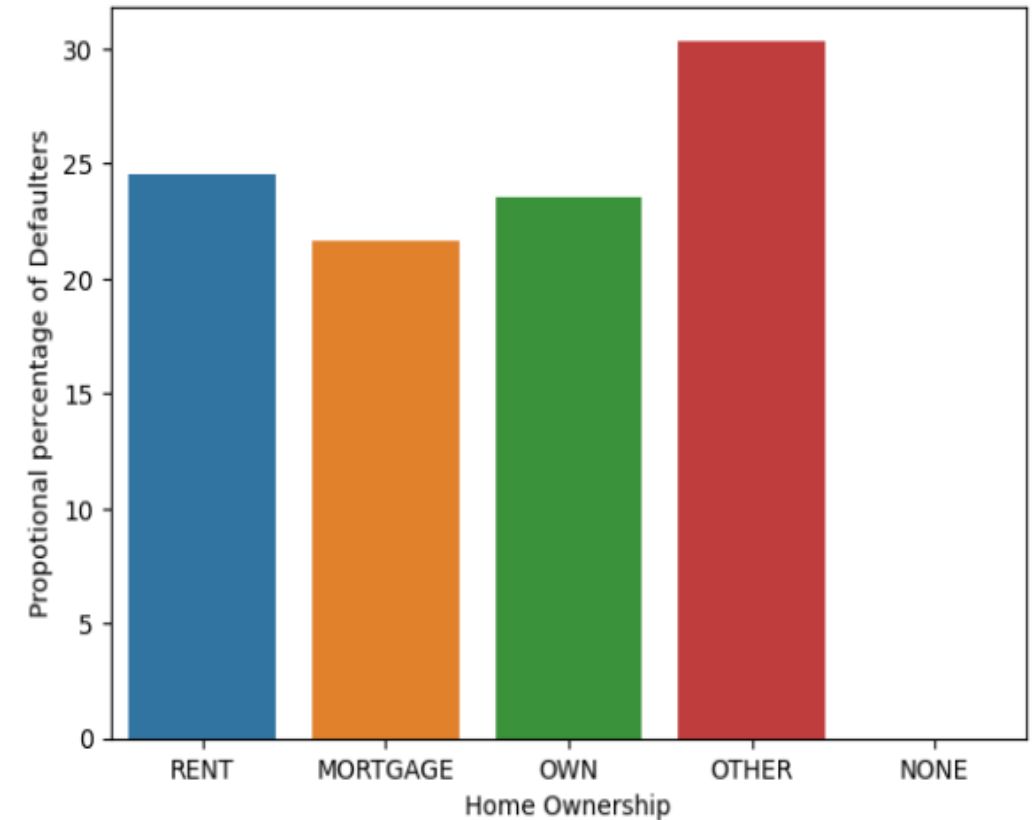
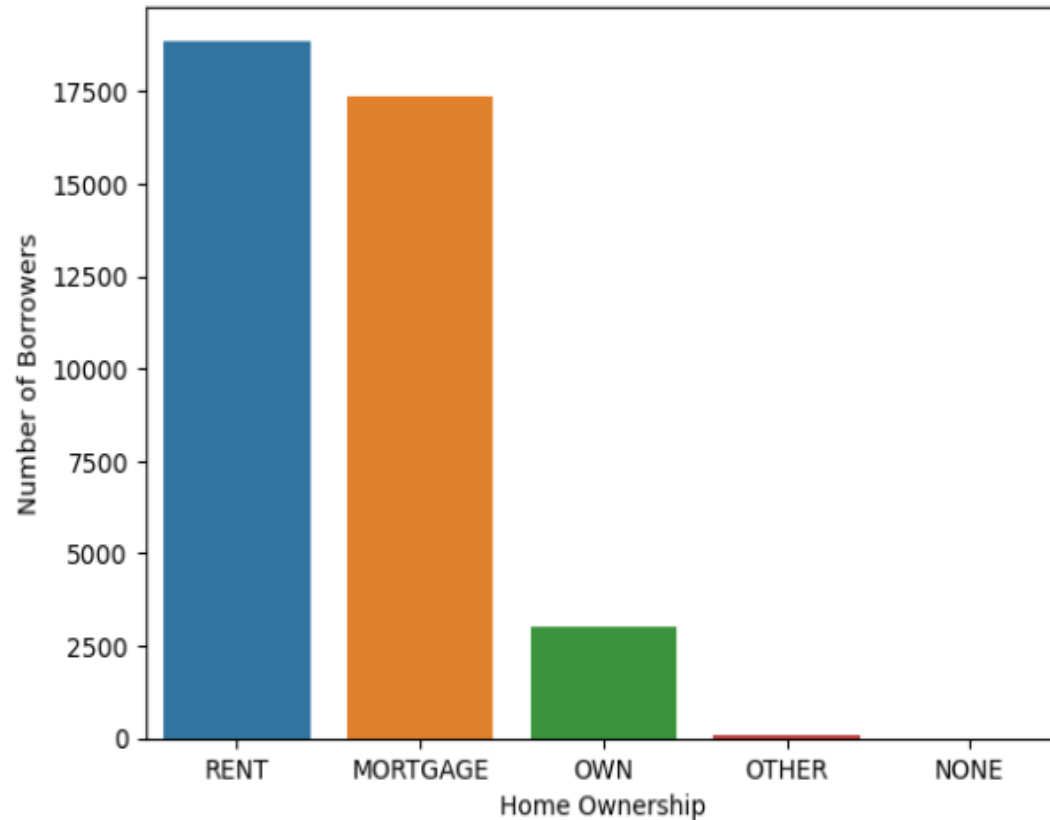
- Loan borrowers decrease from A to G grades.
- B grade employees seems to have taken more loans.
- Default rate is increasing from A to G grades.
- G grade employees have defaulted the most.

- Term



- Term of 36 is the most chosen by borrowers.
- Term of 60 have the highest defaulters.

- Home ownership



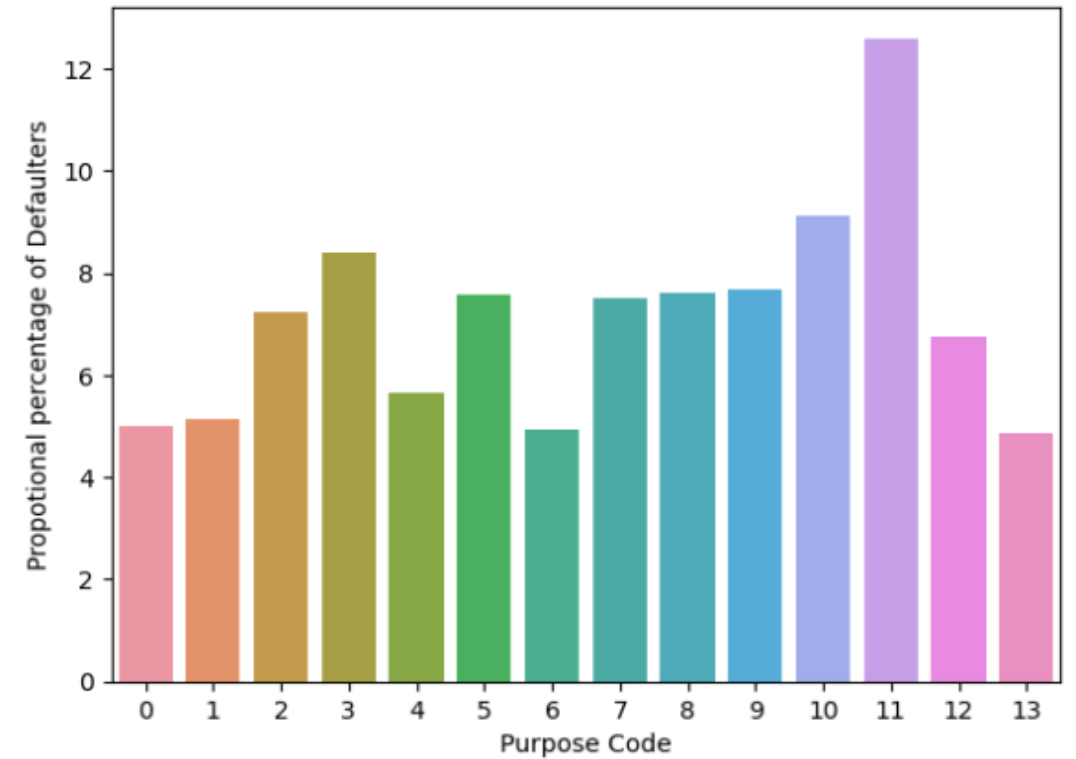
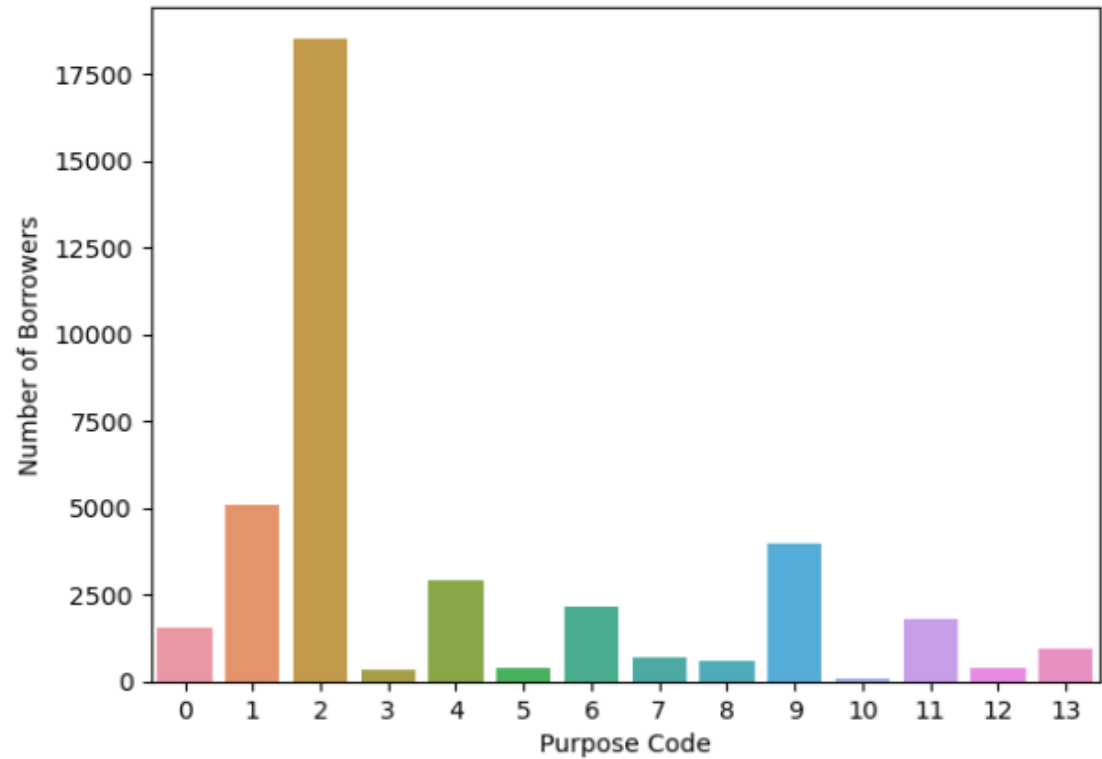
- Employees who rent or have a mortgage have taken more loans.
- Employees who have not clearly mentioned home ownership and have answered as 'OTHER' have the highest default rate

- **Purpose of loan**

## Encoded values of purpose

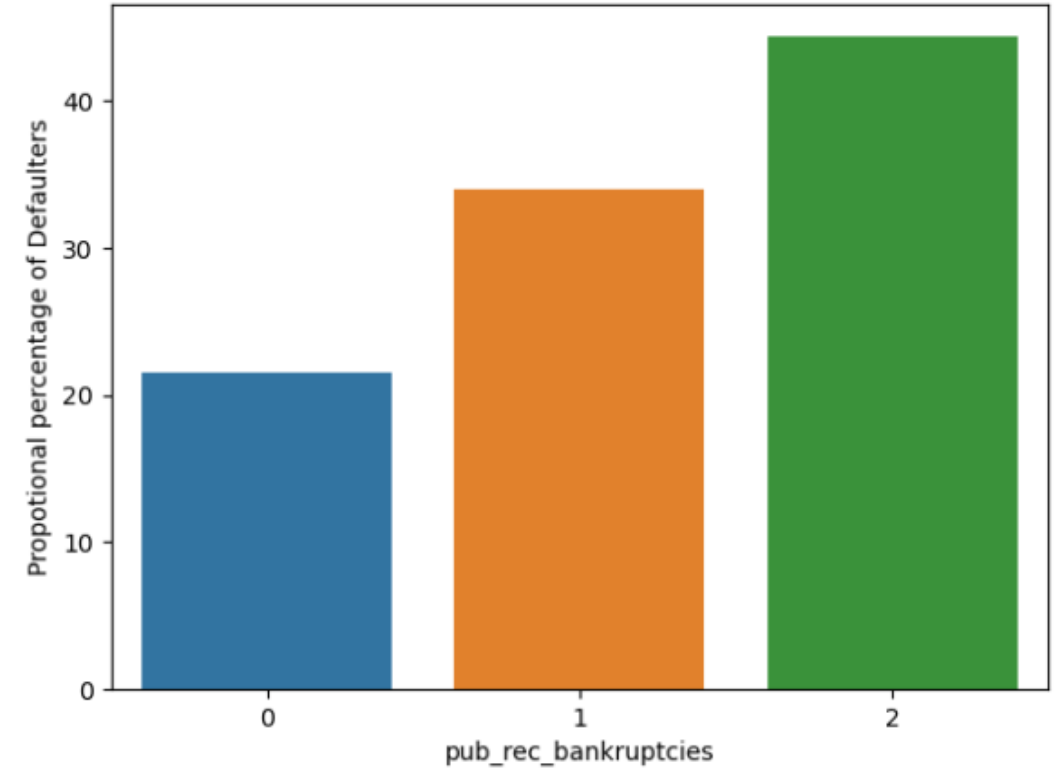
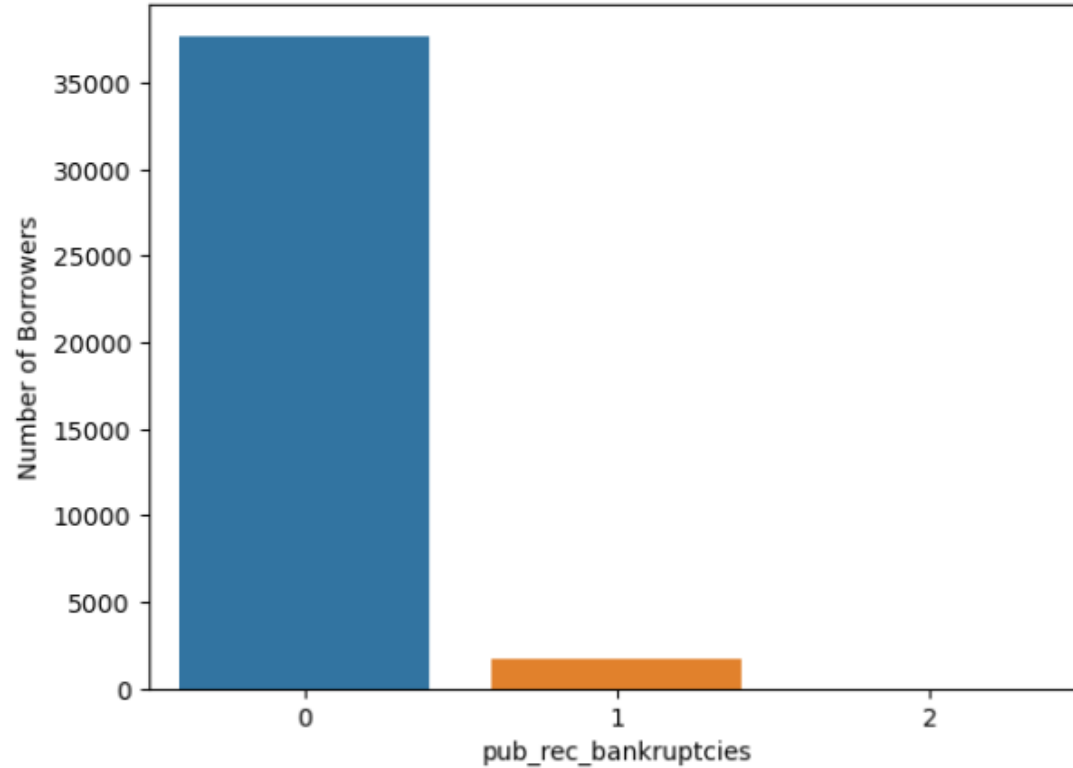
purpose	purpose_code
CAR	0
CREDIT_CARD	1
DEBT_CONSOLIDATION	2
EDUCATIONAL	3
HOME_IMPROVEMENT	4
HOUSE	5
MAJOR_PURCHASE	6
MEDICAL	7
MOVING	8
OTHER	9
RENEWABLE_ENERGY	10
SMALL_BUSINESS	11
VACATION	12
WEDDING	13

- Purpose of loan



- Default rate is highest in the category of 'Small Business' followed by Renewable energy, Educational

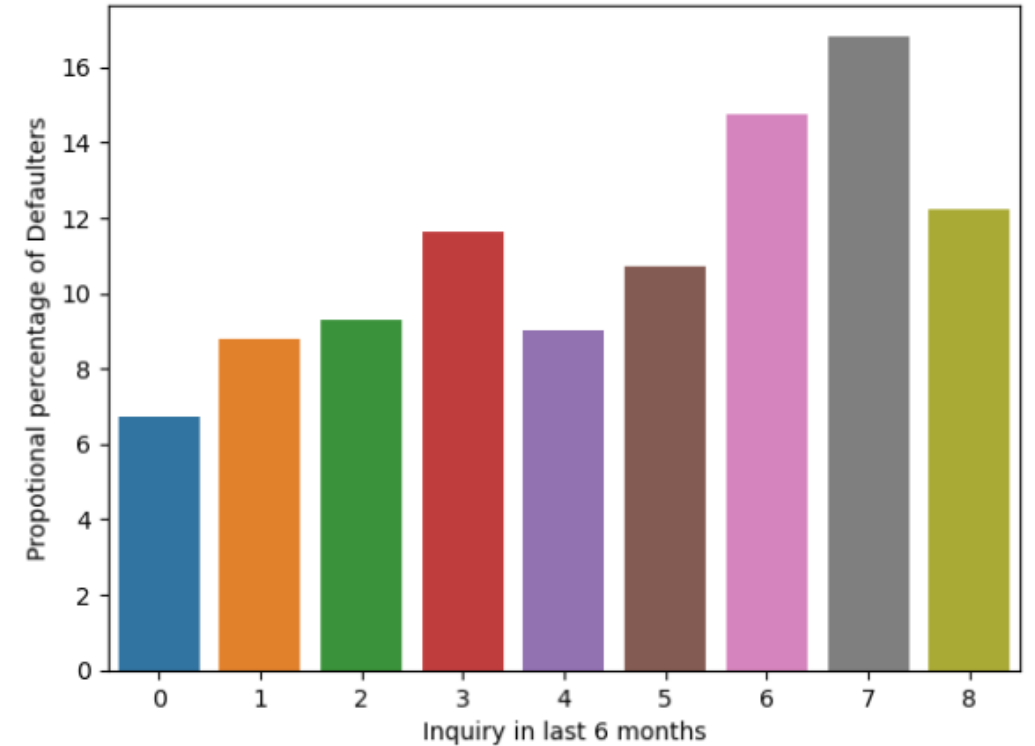
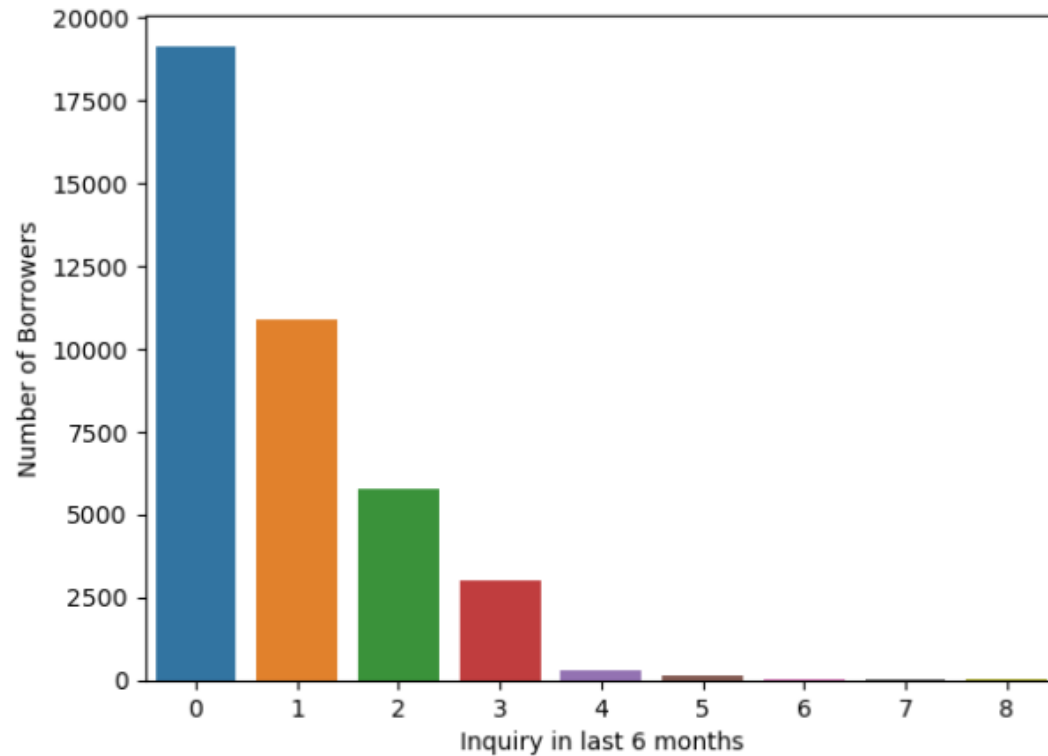
- **Number of public record bankruptcies**



- Higher is the pub\_rec\_bankruptcies, higher is the chance to default

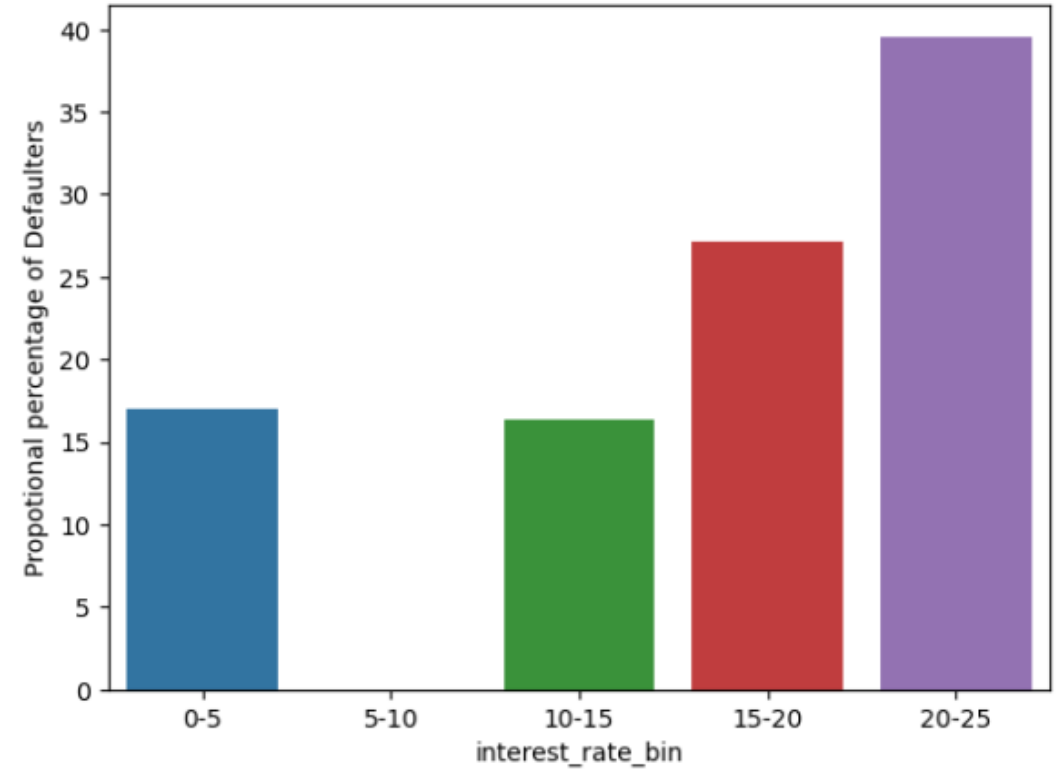
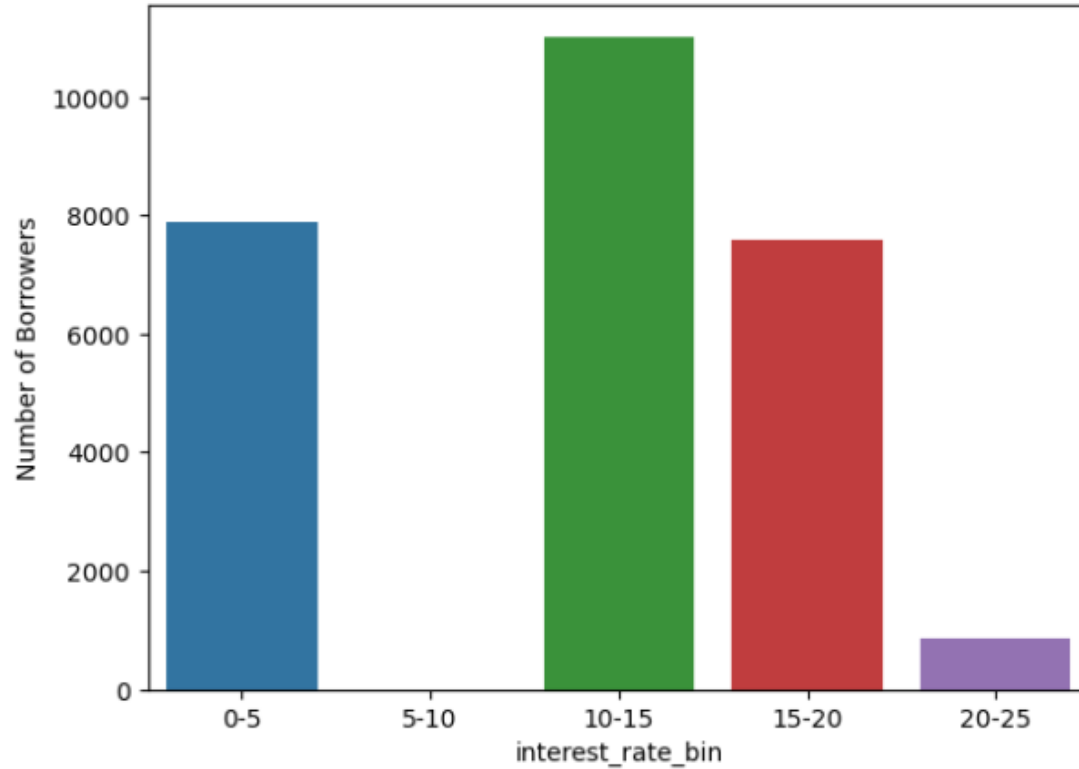


- Inquiry in last 6 months



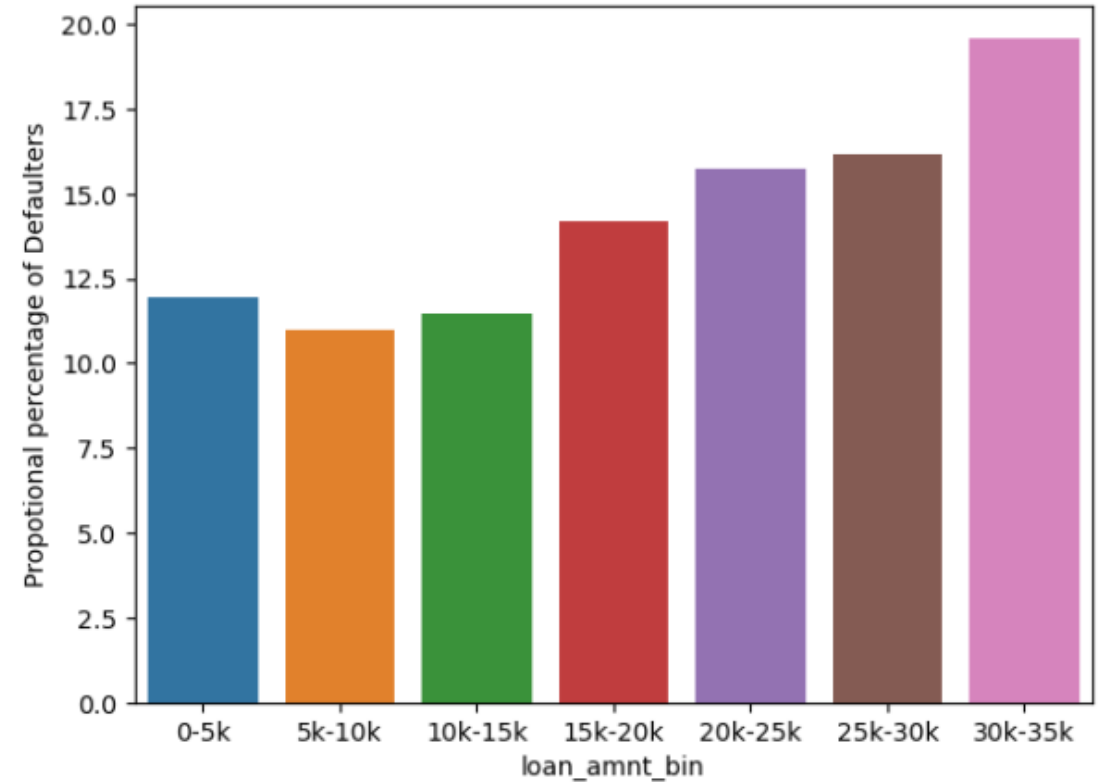
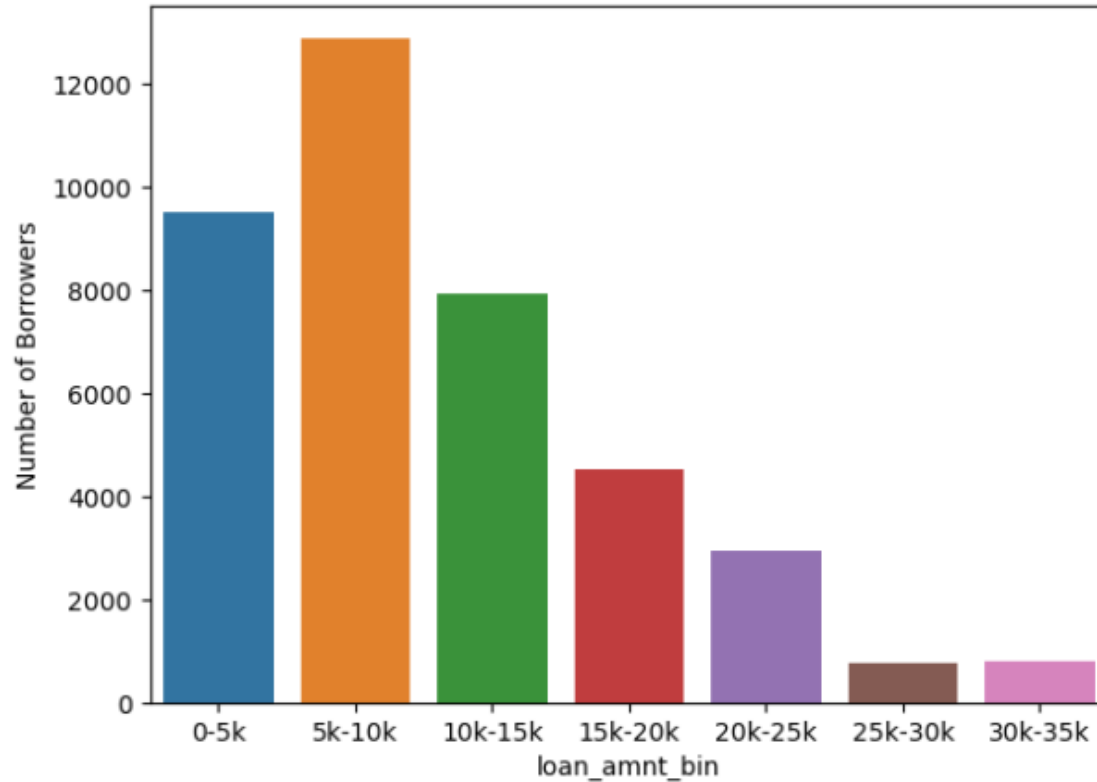
- Employees who paid the loan inquired less.

- **Interest Rate**



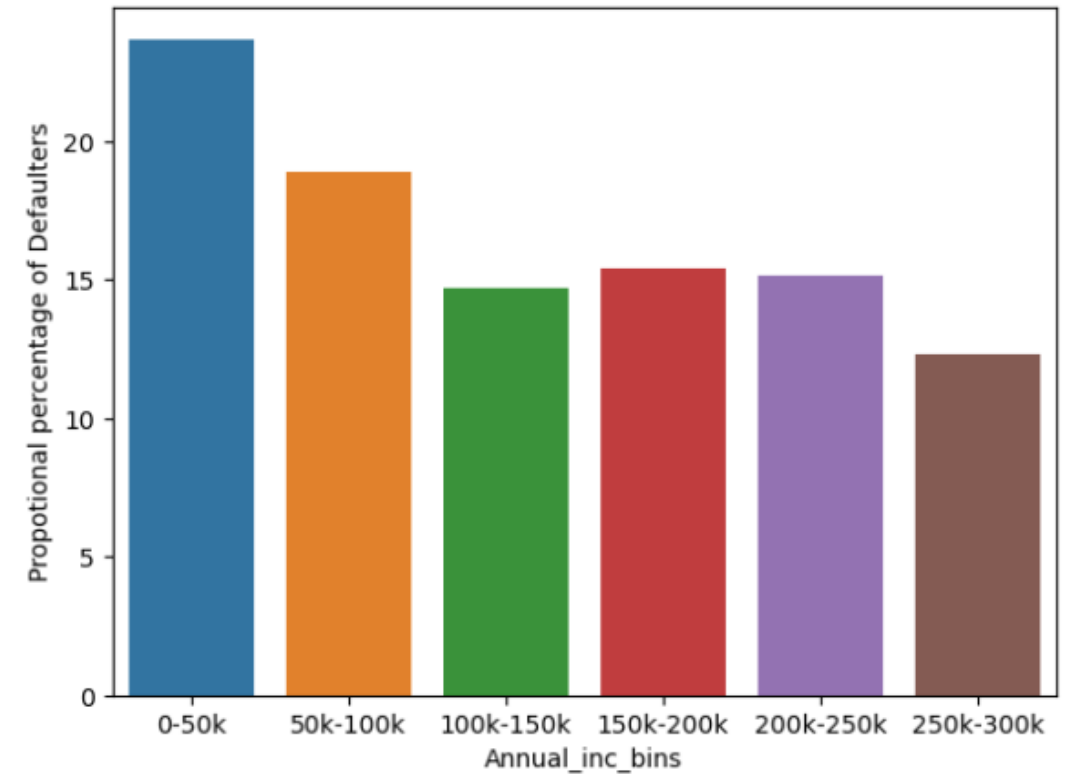
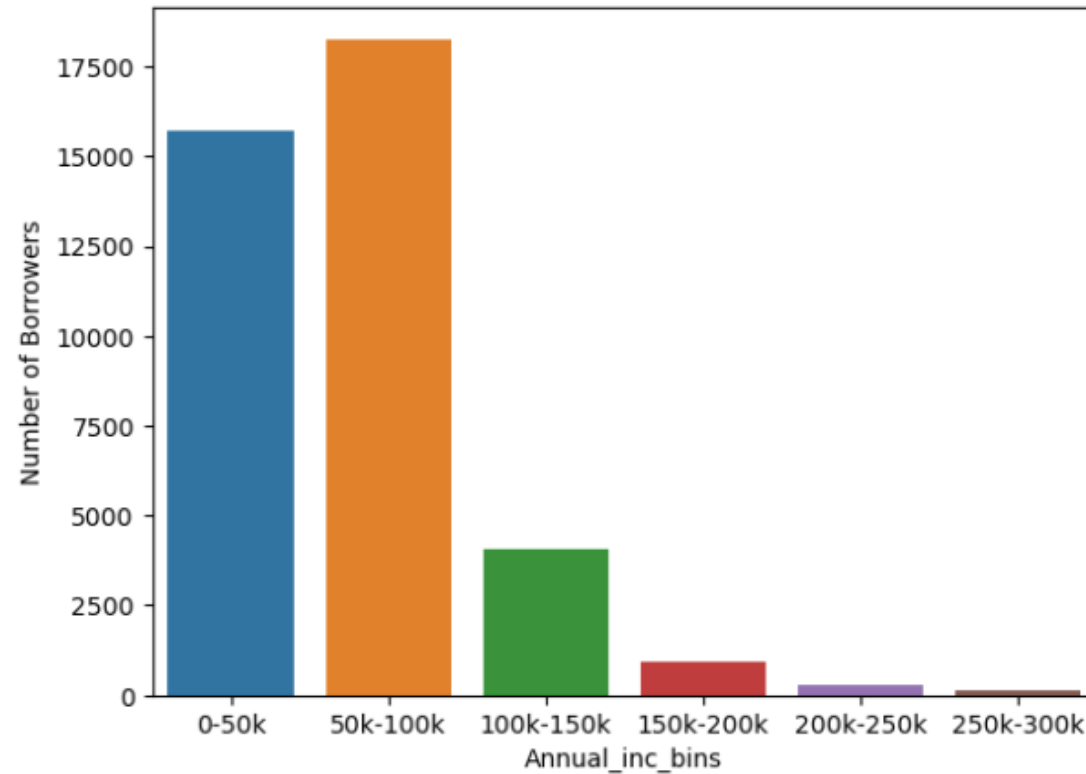
- Defaults are higher for higher interest rates

- **Loan amount**



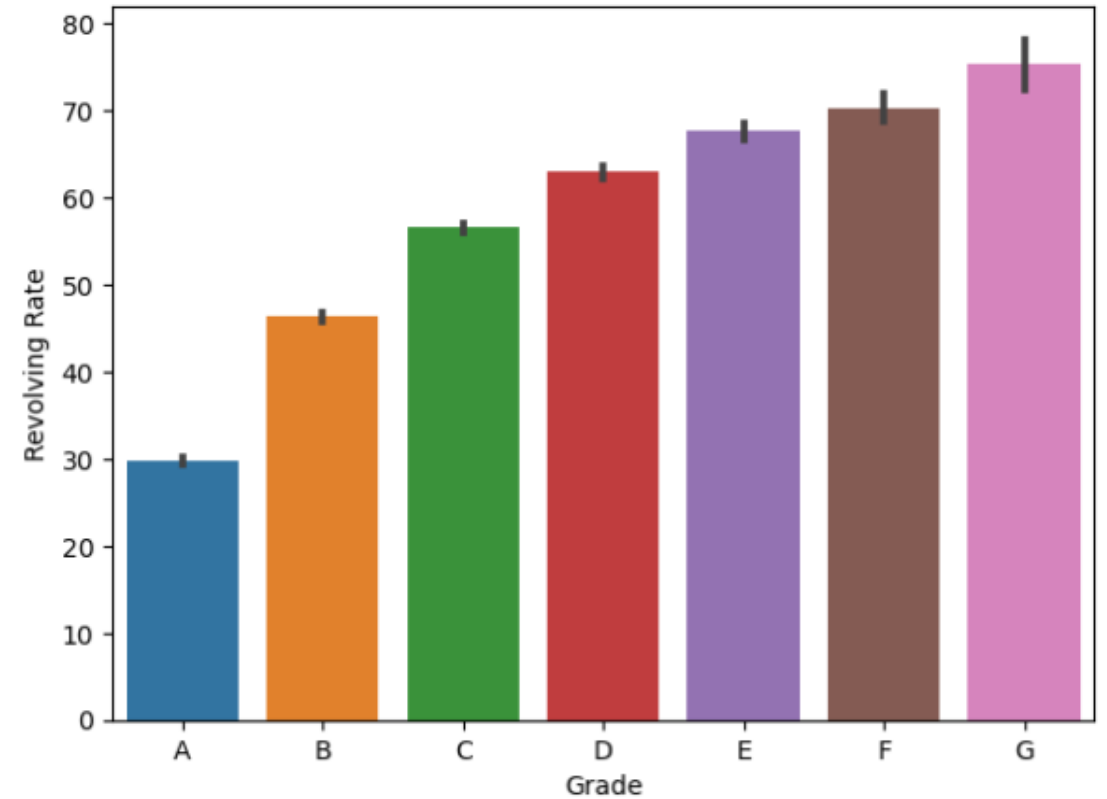
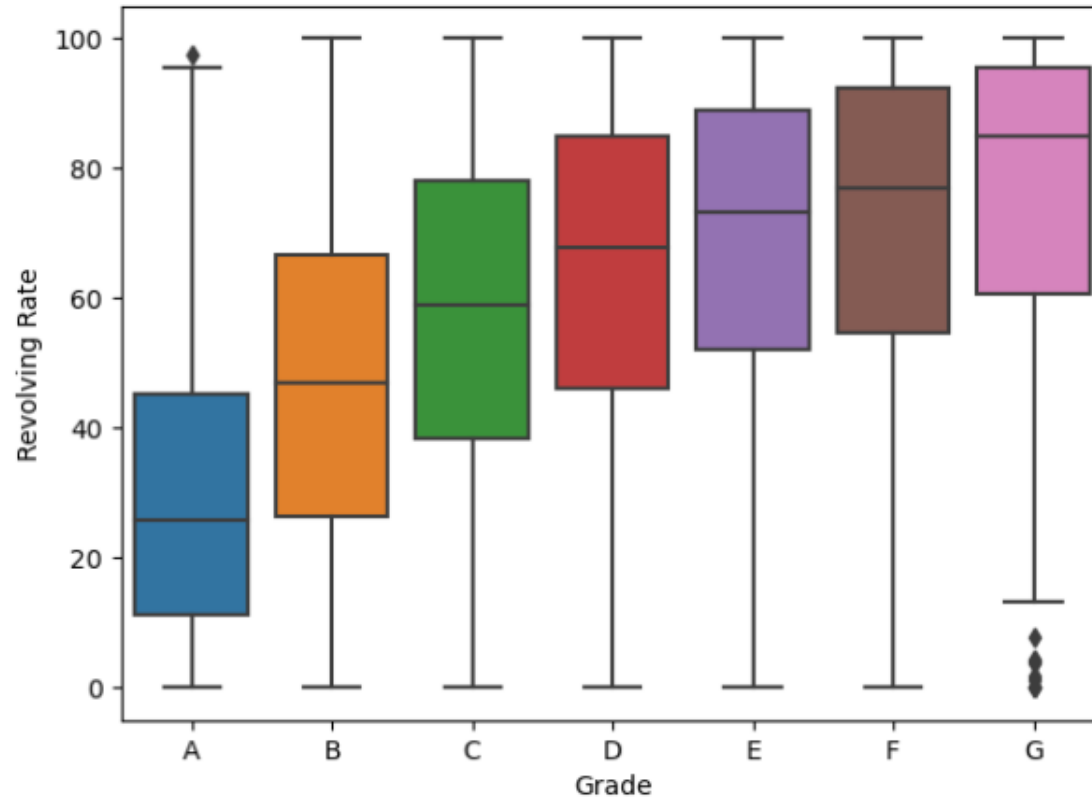
- As loan amount increses there is increased tendency to default

- Annual income



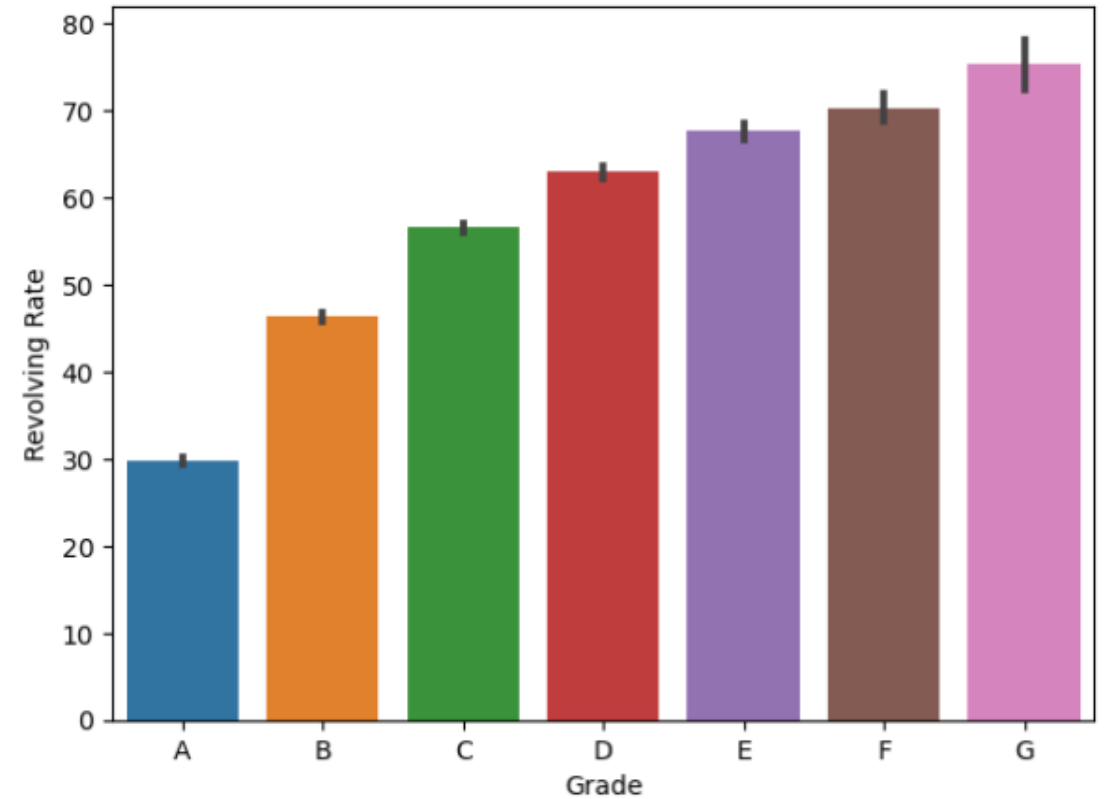
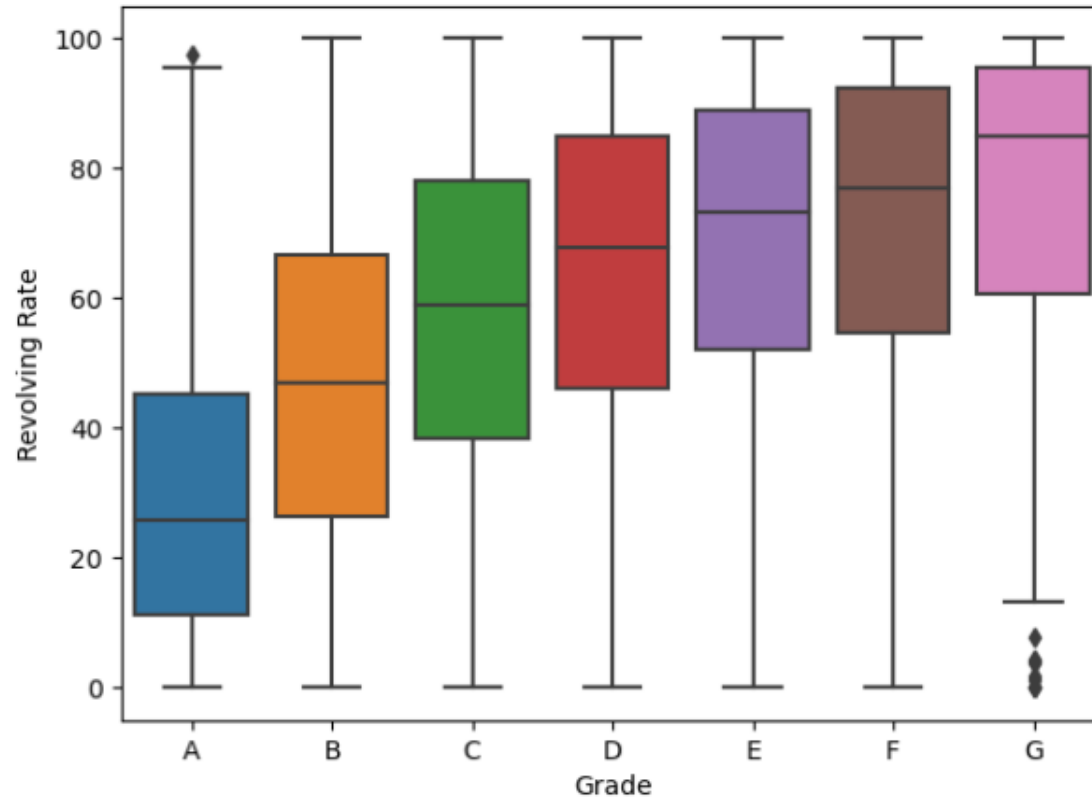
- As annual income increases there is decrease tendency to default

- **Grade & Revolving line utilization rate**



- Revol util rate is increasing from grades A-G.

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