

# Lending Club Case Study

# Problem statement

Lending to 'high-risk' borrowers is the leading cause of credit loss. Credit loss represents the money a lender loses when borrowers fail to repay or abscond with owed funds.

The primary goal is to pinpoint these risky loan applicants, reducing such loans to minimize credit loss. The focus of this case study is to identify such applicants through EDA.

Conduct an analysis to grasp the key factors (or influential variables) behind loan defaults—those variables strongly signaling default. The company can apply this insight to portfolio management and risk assessment.

# Analysis approach

- Data cleansing
- Univariate Analysis
- Segmented Univariate analysis
- Bivariate Analysis

# Results – Univariate analysis

Riskier loans when -

- Debt-to-Income Ratio (DTI) is between 12 and 18.
- Investors fund the amount between 5,000 and 10,000.
- The requested loan amount is between 5,000 and 10,000.
- Monthly installments are between 145K and 274K.
- The loan term is 36 months.
- The loan status is not verified.
- Applicants have an income range of 31,000 to 58,000.
- Applicants receive an interest rate of 13% to 17%.
- The purpose of the loan is 'debt consolidation.'
- Applicants have between 2 and 10 open accounts
- Applicants have house ownership status as 'RENT.'
- Applicants have 0 inquiries in the last 6 months.
- The loan status is not verified.



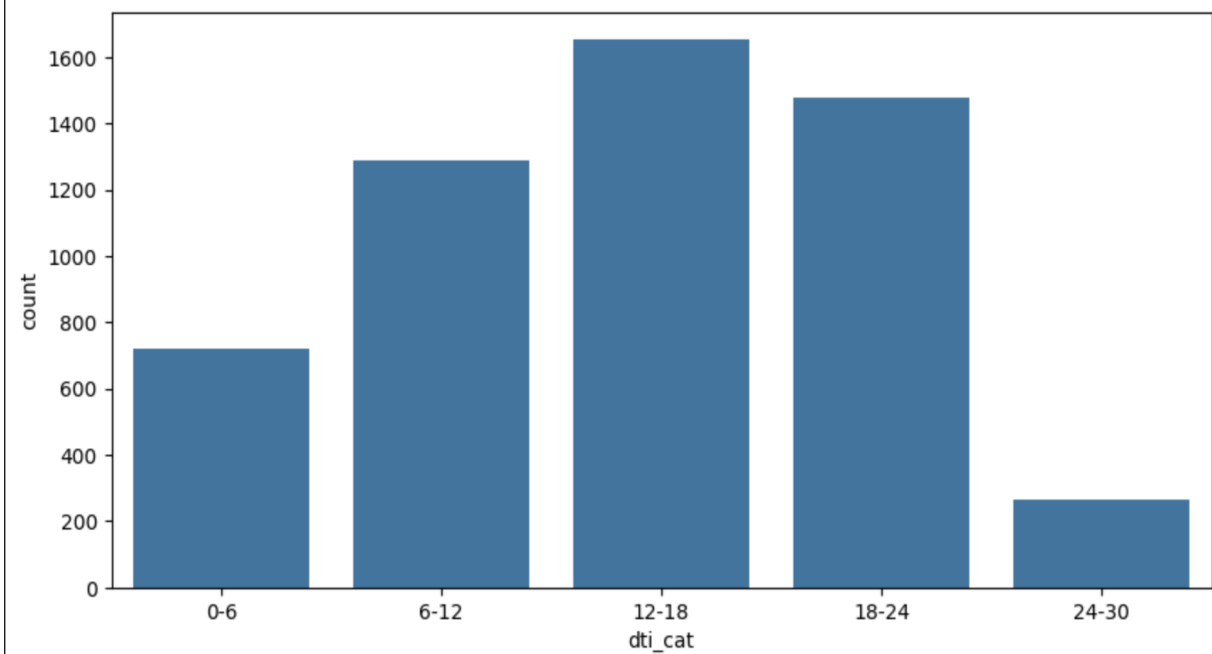
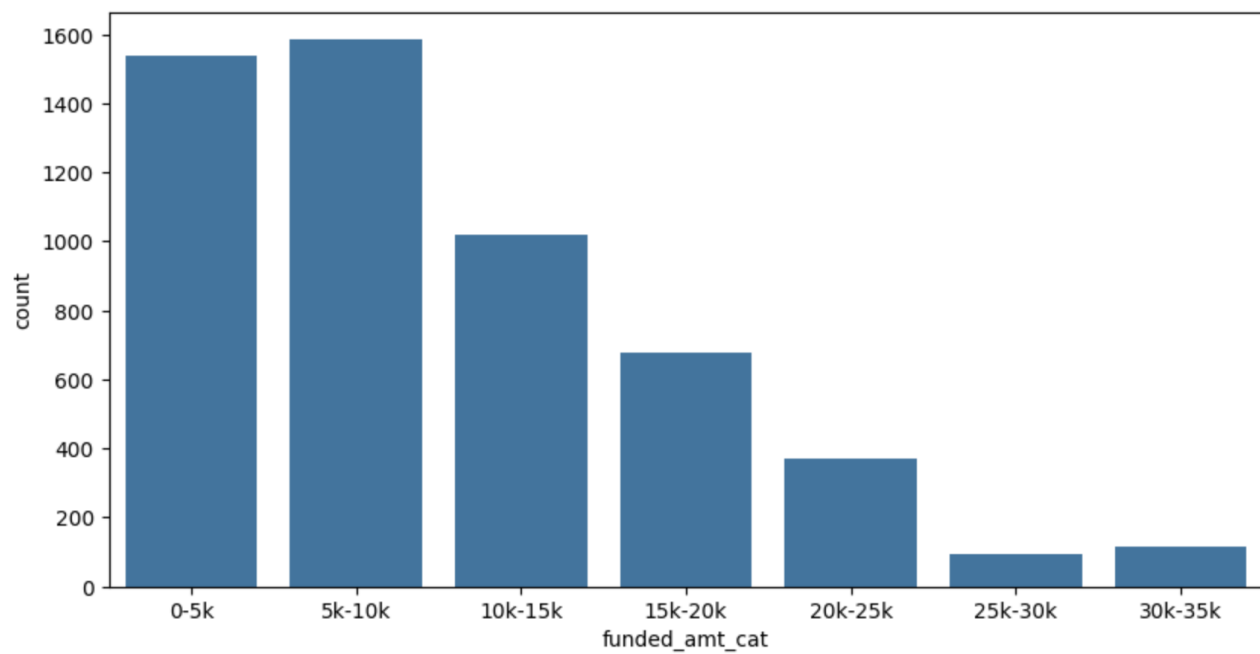




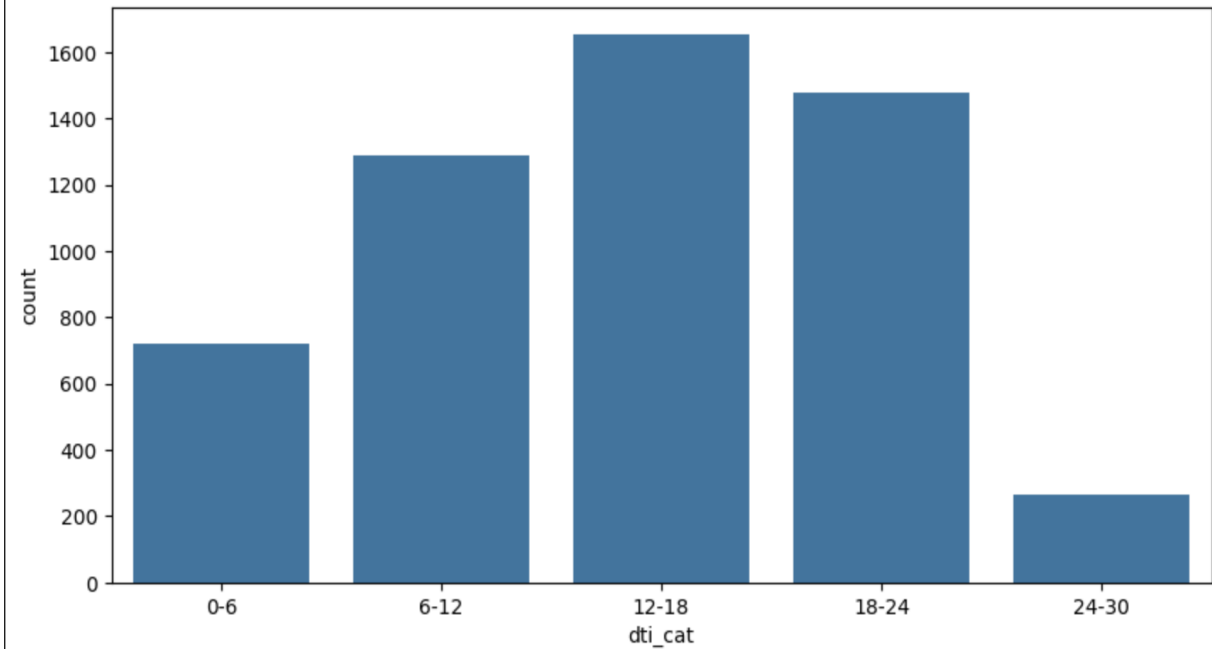
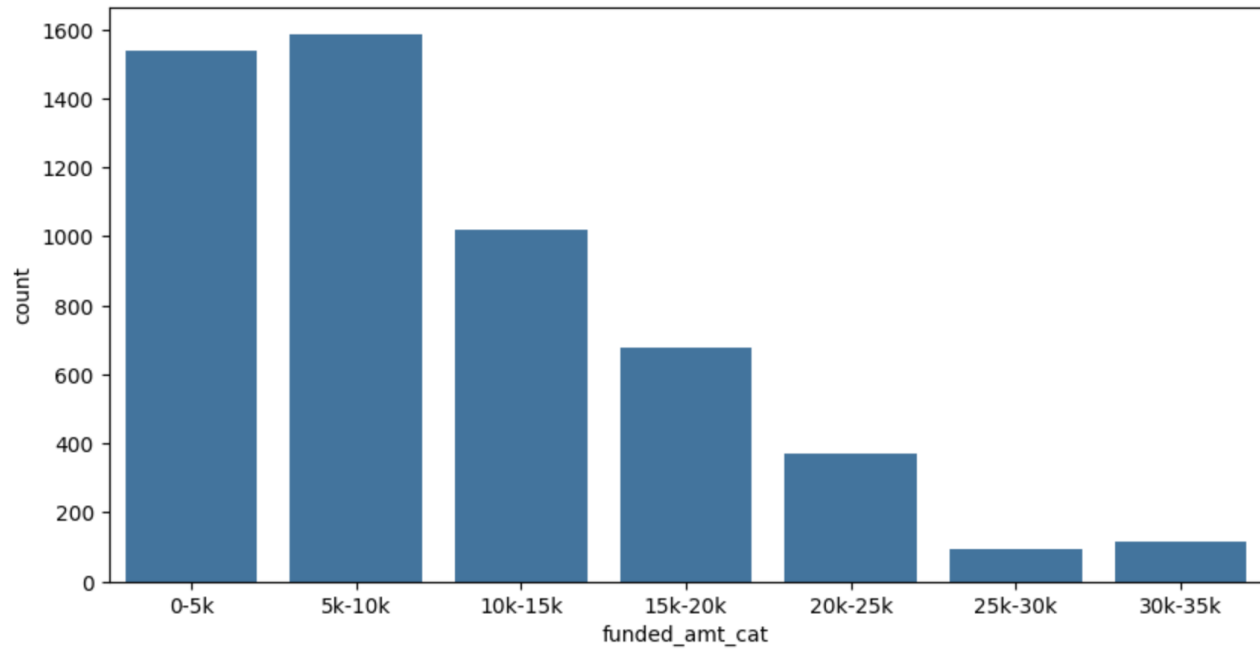




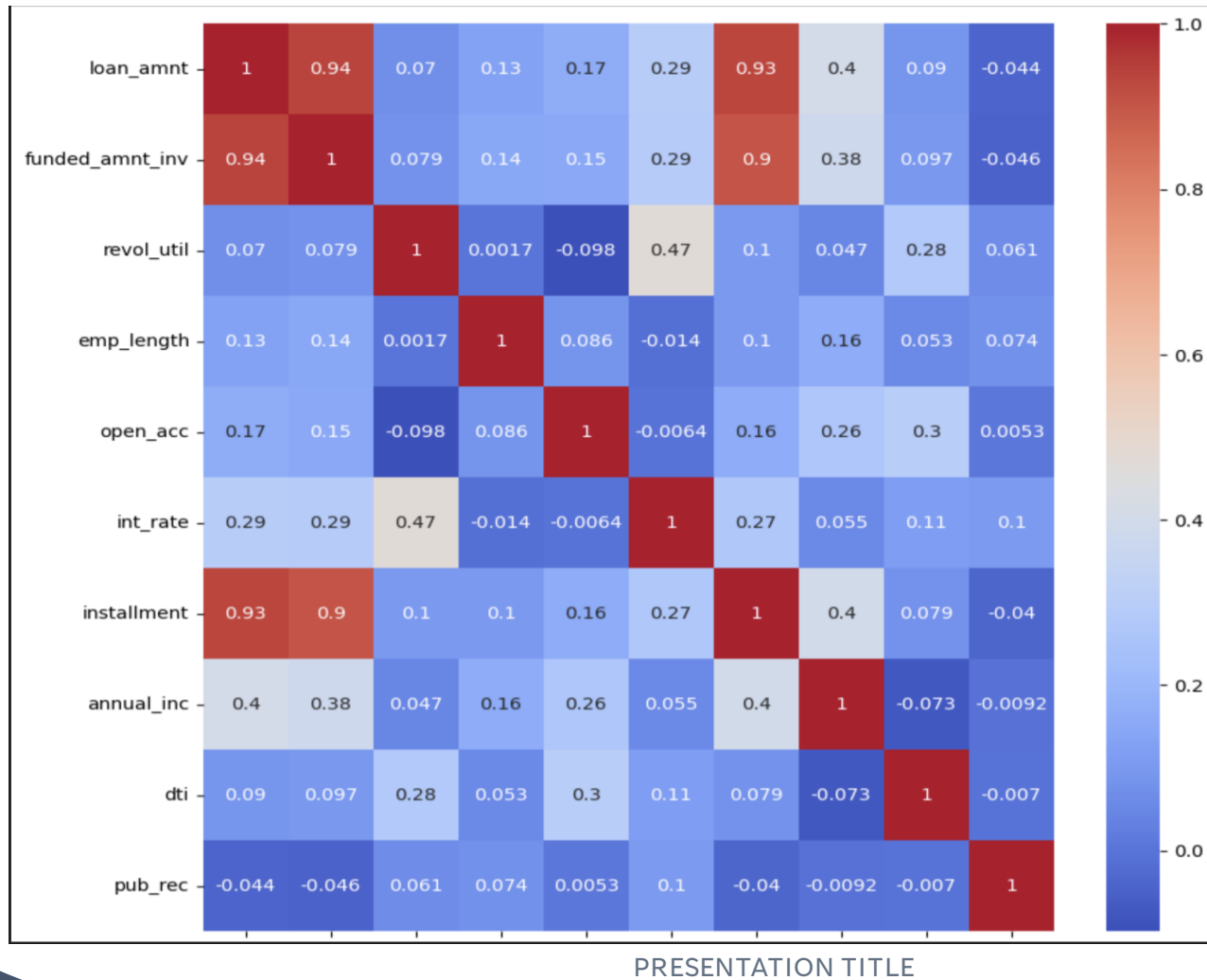
# Visualizations



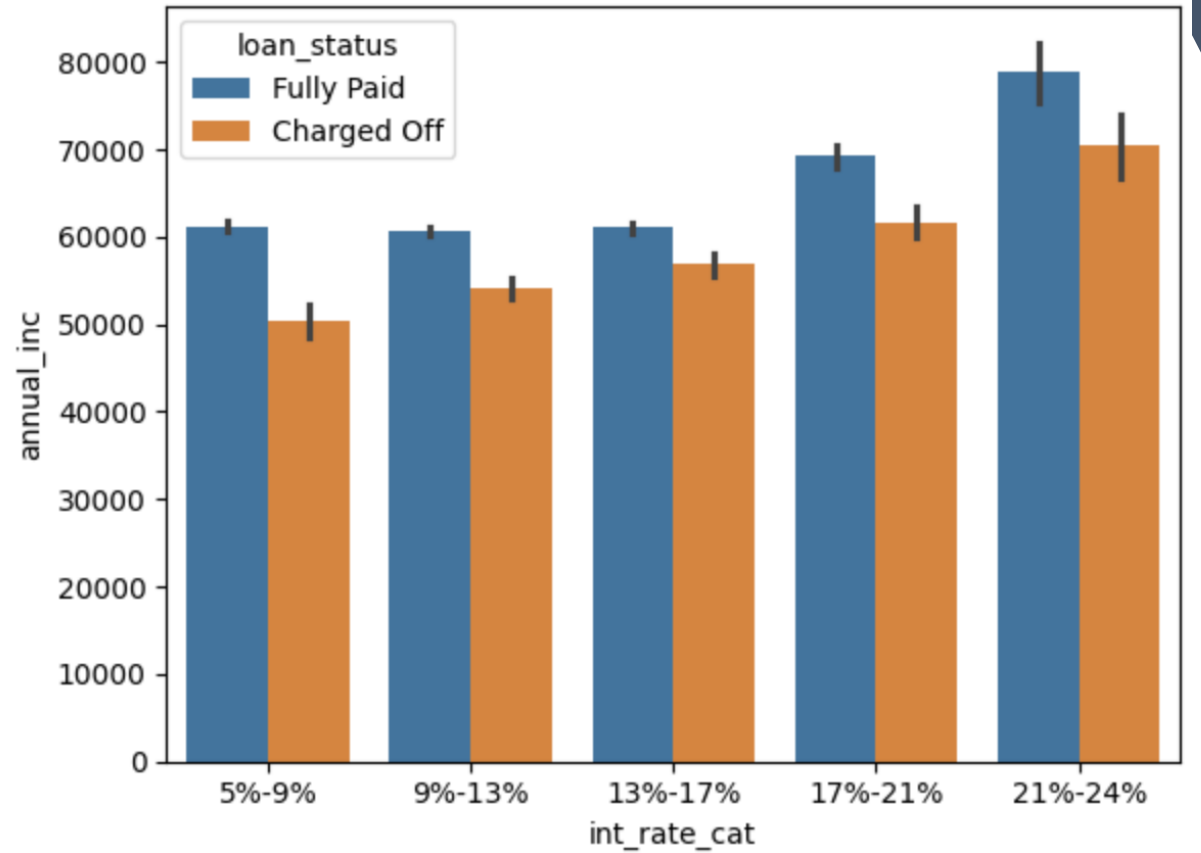
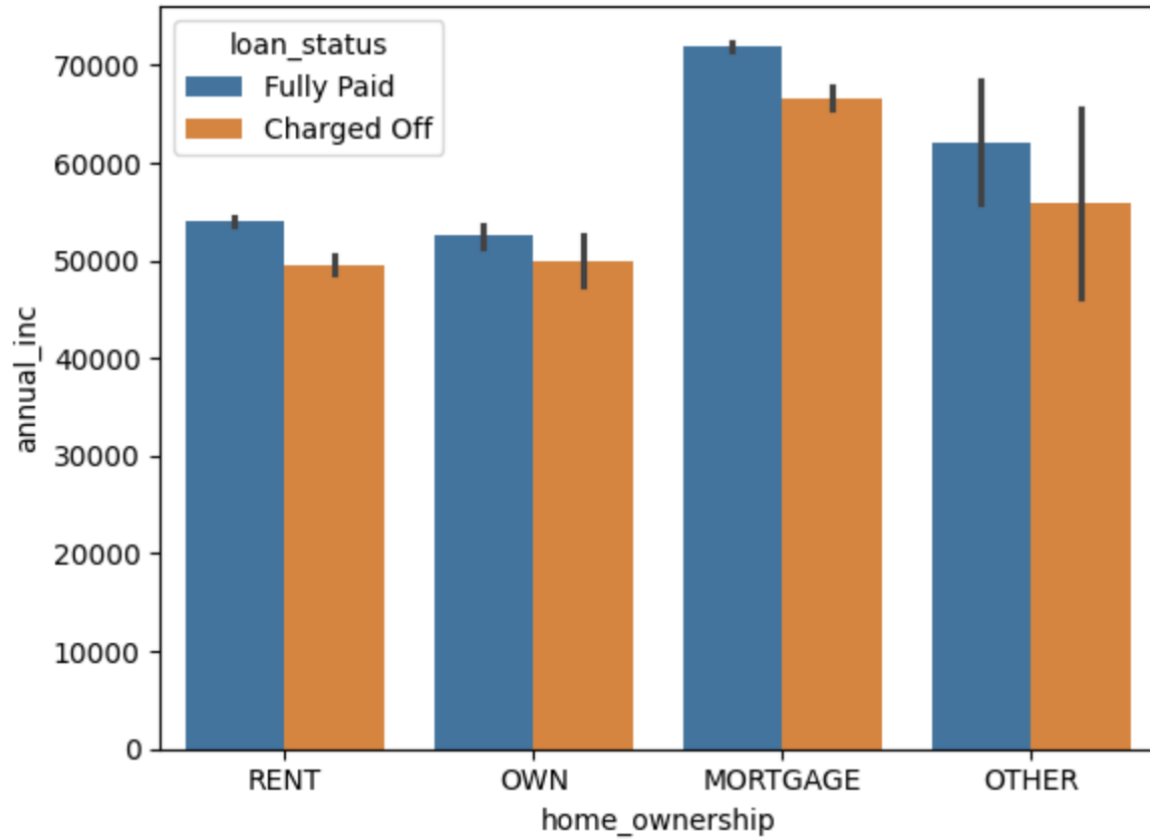
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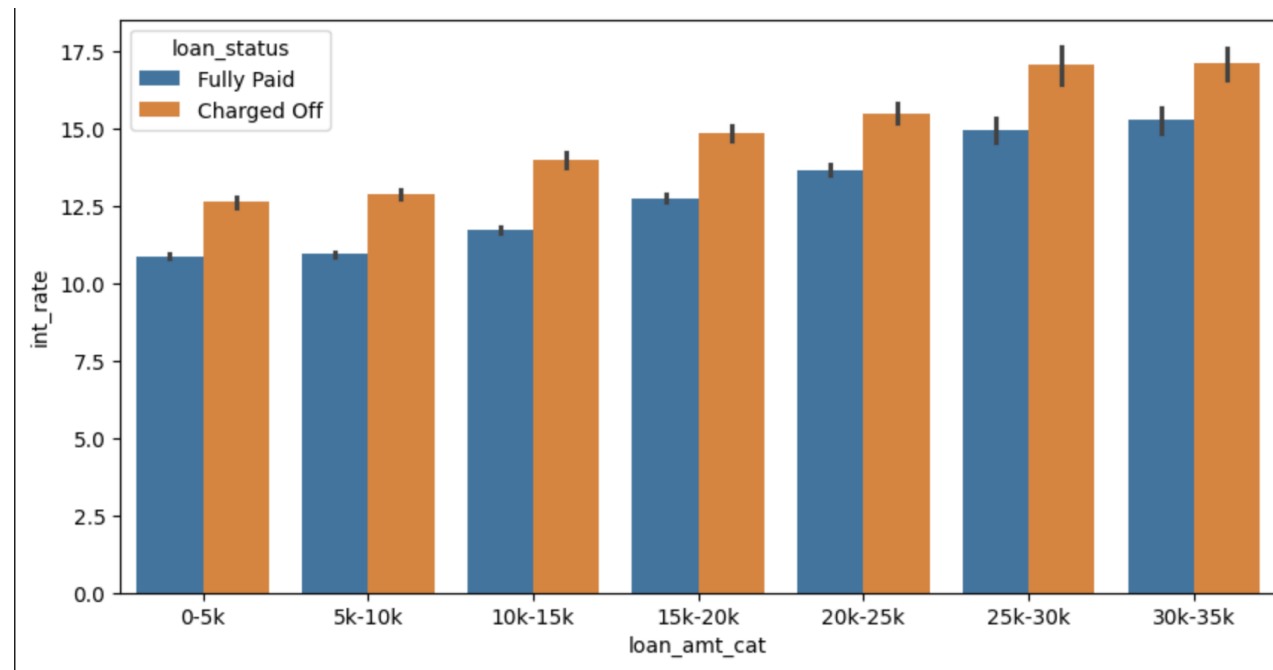
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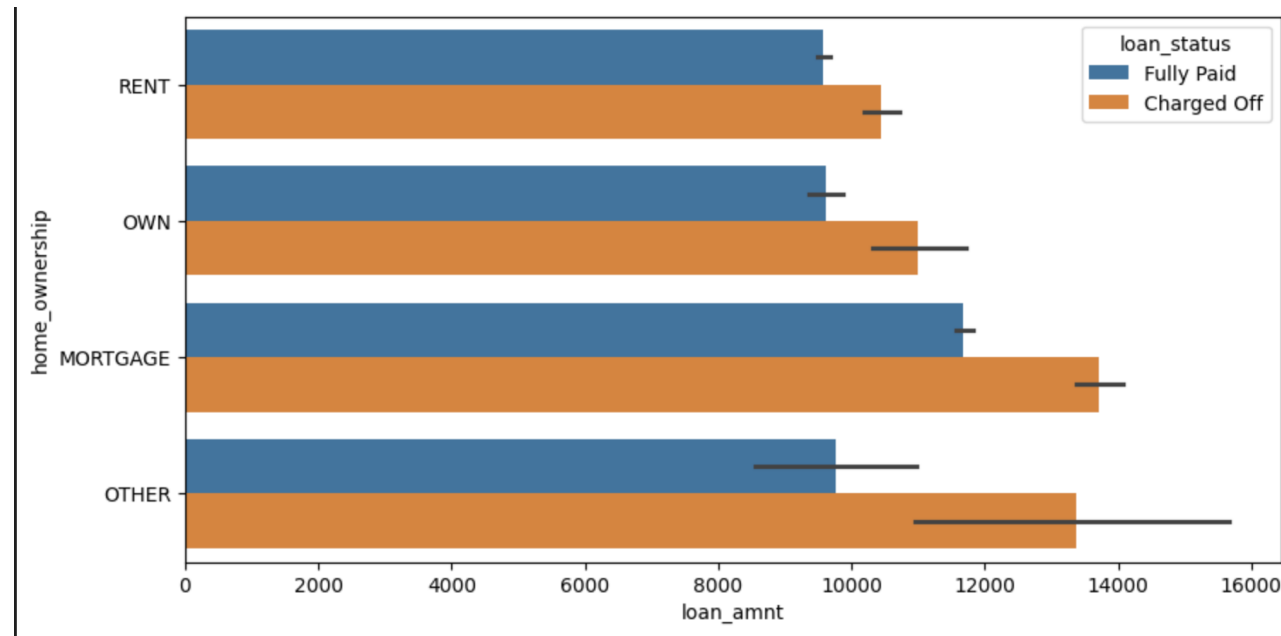
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