Lending Club Case Study

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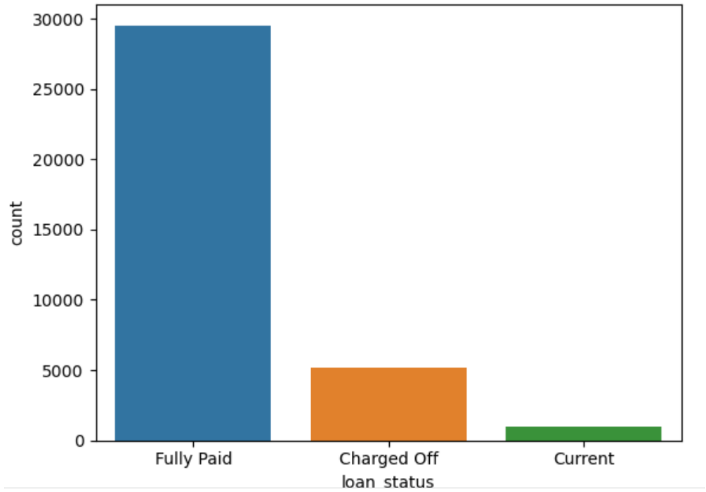
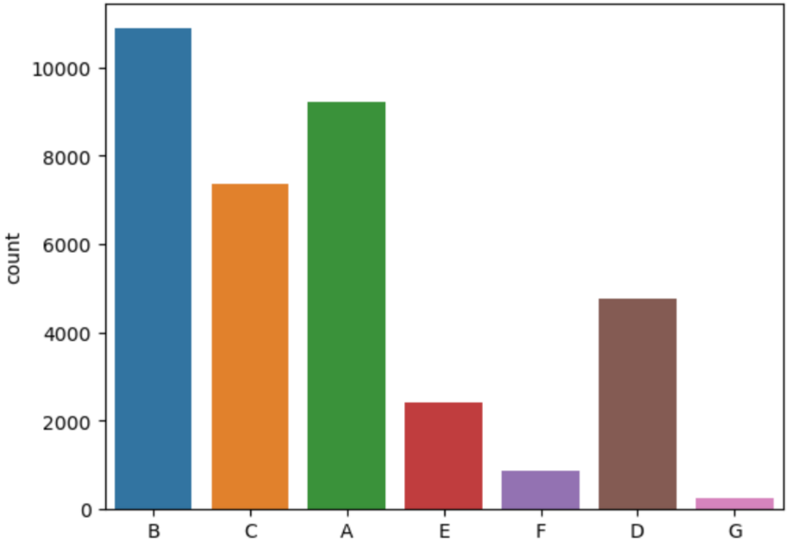
Problem Statement

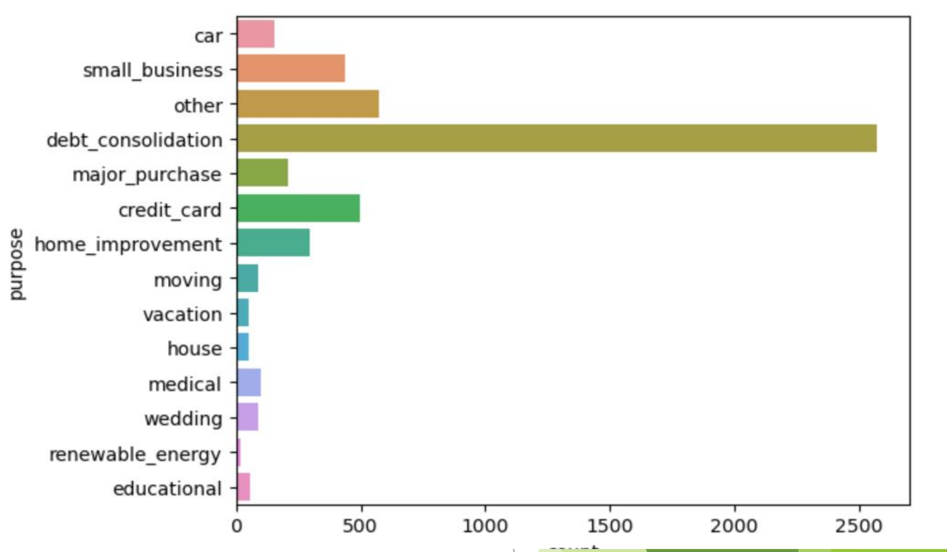
- You work for a **consumer finance company** which specializes in lending various types of loans to urban customers. When the company receives a loan application, the company has to make a decision for loan approval based on the applicant's profile. Two **types of risks** are associated with the bank's decision:

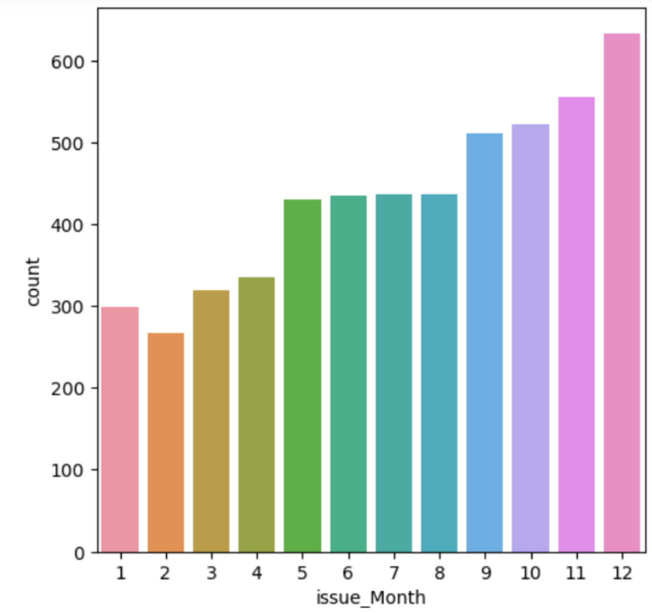
- If the applicant is **likely to repay the loan**, then not approving the loan results in a **loss of business** to the company
- If the applicant is **not likely to repay the loan,** i.e. he/she is likely to default, then approving the loan may lead to a **financial loss** for the company

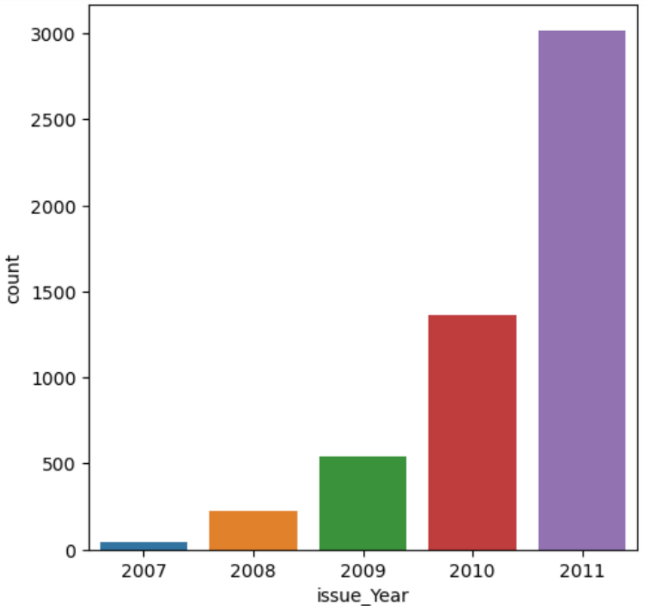
Univariate and bivariate analysis

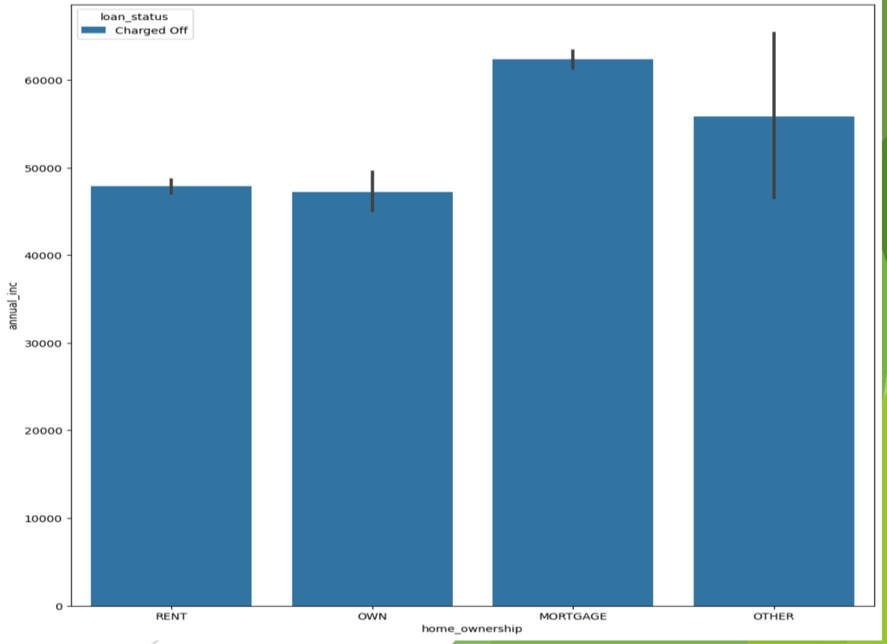












Summary of analysis

- Most loans were taken for the purpose of debt_consolidation.
- Most loans were taken of grade B.
- Most loans were taken by person Renting a house.
- Most of the loans defaulters are people without owning house.
- Loans of grade G,F,E with higher interest rate are more likely to default.
- People with lower annual income are more likely to default.
- Loans with higher interest rate are more likely to default.
- People with less number of open account and less number of total account are more likely to default.
- People with experience less than 1 year are more likely to default.
- Loan taken with purpose as small_business and renewable energy are more likely to default but the highest number of loans defaulted were taken for debt_consolidation purpose.
- 2011 was a different year with highest number of defaulted loans.