

SQL Questions, Solutions, Business Problems, and Insights for Loan Datasets Using SQL.

-- 1) Count of Loans by Purpose

Business Problem: Understand the distribution of loans across different purposes.

Insight: Helps in identifying the most common reasons customers apply for loans.

-- 2) Average Interest Rate by Credit Policy

Business Problem: Assess the impact of credit policy on interest rates.

Insight: Indicates whether riskier borrowers (`credit_policy = 0`) are assigned higher interest rates.

-- 3) Maximum Debt-to-Income Ratio

Business Problem: Identify the highest debt-to-income ratio to assess risk.

Insight: Flags customers with high debt relative to their income.

-- 4) Count of Top 10 Delinquent Loans by FICO Score

Business Problem: Identify FICO scores associated with delinquent loans.

Insight: Pinpoints the credit scores that might be riskier for loan repayment.

-- 5) Average Revolving Line Utilization by Loan Purpose

Business Problem: Understand how borrowers use their revolving credit lines.

Insight: Highlights patterns in credit utilization based on loan purpose.

-- 6) Percentage of Fully Paid Loans

Business Problem: Evaluate the overall loan repayment success rate.

Insight: Provides a key metric for assessing the performance of the lending portfolio.

-- 7) Top 5 Highest Installment Amounts

Business Problem: Identify loans with the highest monthly installments.

Insight: Helps understand the range of installment amounts and potential impact on borrower finances.

-- 8) Distribution of top 10 scores by count

Business Problem: Understand the distribution of top FICO scores.

Insight: Provides a breakdown of the frequency of the highest credit scores.

-- 9) Count of Public Records by Loan Purpose

Business Problem: Assess the impact of public records on loan purposes.

Insight: Highlights the association between public records and the reasons for loan applications.

-- 10) Average Annual Income for Fully Paid vs. Not Fully Paid

Business Problem: Analyze the relationship between annual income and loan repayment.

Insight: Helps in assessing whether borrowers with higher incomes are more likely to repay loans fully.