**World Bank Loan Analysis Project: Using SQL for Data Exploration**

This document outlines a project using SQL to analyze loan data from the World Bank. The goal is to gain insights into borrowing patterns, repayment trends, and loan distribution across different categories.

**Project Overview:**

The World Bank plays a crucial role in supporting developing countries through loans and grants. This project delves into the world of World Bank loan data, aiming to answer questions like:

* Which countries are borrowing the most?
* How are loan amounts distributed across different credit grades?
* Are borrowers with verified status repaying loans more efficiently?
* How does loan status vary across states and last credit pull dates?
* Do homeowners exhibit different payment patterns compared to non-homeowners?

**Data Exploration with SQL:**

The project utilizes SQL queries to explore the provided Bank\_loan\_analysis database containing two tables: Finance\_1 and Finance\_2.

**Key Performance Indicators (KPIs):**

1. **Year-wise Loan Amount:** This KPI analyzes the total loan amount disbursed each year, providing a temporal view of loan trends.

SQL

SELECT year(issue\_d) AS year\_of\_issue,

SUM(loan\_amnt) AS Loan\_amount

FROM Finance\_1

GROUP BY year(issue\_d)

ORDER BY year\_of\_issue;

Use code [with caution.](/faq#coding)

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1. **Grade & Sub-grade wise Revolving Balance:** This KPI examines the total revolving balance (outstanding credit) categorized by loan grade and sub-grade, offering insights into risk profiles.

SQL

SELECT grade, sub\_grade, SUM(revol\_bal) AS total\_revol\_bal

FROM Finance\_1

INNER JOIN Finance\_2

ON Finance\_1.id = Finance\_2.id

GROUP BY grade, sub-grade

ORDER BY grade, sub-grade;

Use code [with caution.](/faq#coding)

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1. **Total Payment for Verified vs. Non-Verified Status:** This KPI investigates the total payments made by borrowers with verified and non-verified statuses, potentially revealing differences in repayment behavior.

SQL

SELECT verification\_status, ROUND(SUM(total\_pymnt), 2) AS total\_payment

FROM Finance\_1

INNER JOIN Finance\_2

ON Finance\_1.id = Finance\_2.id

GROUP BY verification\_status;

Use code [with caution.](/faq#coding)

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1. **State-wise Loan Status by Last Credit Pull Date:** This KPI focuses on loan statuses across different states, considering the last credit pull date. It might shed light on potential loan delinquency patterns.

SQL

SELECT loan\_status, last\_credit\_pull\_d, addr\_state

FROM Finance\_1

INNER JOIN Finance\_2

ON Finance\_1.id = Finance\_2.id

WHERE last\_credit\_pull\_d IS NOT NULL

ORDER BY last\_credit\_pull\_d;

Use code [with caution.](/faq#coding)

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1. **Home Ownership vs. Last Payment Date Statistics:** This KPI explores payment patterns for different home ownership categories (rent, own, mortgage), potentially indicating variations in financial situations.

SQL

SELECT home\_ownership,

YEAR(last\_pymnt\_d) AS payment\_year,

ROUND(SUM(last\_pymnt\_amnt), 2) AS total\_payment

FROM Finance\_1

INNER JOIN Finance\_2

ON Finance\_1.id = Finance\_2.id

WHERE YEAR(last\_pymnt\_d) IS NOT NULL

GROUP BY home\_ownership, YEAR(last\_pymnt\_d)

ORDER BY home\_ownership;