**Bank Loan Analytics Dashboard (Power BI Project)**

**🔹 Project Overview**

This project focuses on analyzing **bank loan data** and creating interactive dashboards using **Power BI**.  
The goal was to track key loan metrics, distinguish between **Good Loans vs Bad Loans**, and provide insights into lending activities for better decision-making.

**🔹 Problem Statement**

Banks need to monitor and assess lending performance to:

* Track **loan applications, funded amounts, repayments, interest rates, and DTI**.
* Classify loans into **Good Loans (Fully Paid, Current)** and **Bad Loans (Charged Off)**.
* Identify **monthly trends, regional differences, borrower profiles**, and lending patterns.

**🔹 Dashboards Created**

1. **Summary Dashboard**
   * Key KPIs: Total Loan Applications, Funded Amount, Received Amount, Avg. Interest Rate, Avg. DTI.
   * Good vs Bad Loan segmentation.
2. **Overview Dashboard**
   * Monthly trends in loan applications & funding.
   * Loan distribution by Purpose, Term, State, Employment Length, and Home Ownership.
   * Visuals: Line Charts, Donut Chart, Bar Charts, Tree Map, Filled Map.
3. **Details Dashboard**
   * Comprehensive loan-level details for in-depth analysis.
   * Drill-down into borrower & loan performance.

**🔹 Tools & Skills Used**

* **Power BI** – Dashboard Design, DAX, Data Modeling
* **Excel** – Data Cleaning & Preparation
* **Data Visualization** – Line, Bar, Donut, Tree Map, and Geo Map
* **Business Analytics** – KPI tracking & financial insights

**🔹 Key Insights**

* **85%** of loans are Good Loans; only **14%** are Bad Loans.
* Loan purposes like **Debt Consolidation** and **Credit Card Refinancing** dominate.
* Regional disparities exist, with some states showing higher loan activity.
* **Employment length & home ownership** significantly influence loan approvals.

**🔹 How This Helps**

This project provides **data-driven insights** into bank loan portfolios and demonstrates skills in:

* Financial Data Analysis
* BI Reporting & Dashboard Creation
* Business Intelligence for Decision Making