*--------------------------PROBLEM STATEMENT -----------------------------------*

**PROBLEM STATEMENT**

**DASHBOARD 1: SUMMARY**

**Key Performance Indicators (KPIs) Requirements:  
1. Total Loan Applications**: We need to calculate the total number of loan applications received during a specified period. Additionally, it is essential to monitor the Month-to-Date (MTD) Loan Application and track changes Month–over-Month (MoM).

**2. Total Funded Amount**: Understanding the total amount of funds disbursed as loan is crucial. We also want to keep an eye on the MTD Total Funded Amount and analyse the Month-over-Month (MoM) changes in the metric.

**3. Total Amount Received**: Tracking the total amount receive from borrowers is essential for assessing the bank’s cash flow and loan repayment. We should analyse the Month-to-Date (MTD) Total Amount Received and observe the Month-over-Month(MoM) changes.

**4. Average Interest Rate**: Calculating the average interest rate across all loans, MTD and monitoring the Month-over-Month (MoM) variation in interest rates will provide insights into our lending portfolio’s overall cost.

**4. Average Depth-to-Income Ratio(DTI)**: Evaluating the average DTI for our borrowers helps usgauge their financial health. We need to compute the average DTI for all loans, MTD and track Month-over-Month (MoM) fluctuations.

**Good Loan vs Bad Loan (KPIs)   
Good Loan BAD Loan**1. Good Loan Application Percentage 1. BAD Loan Application Percentage2. Good Loan Application 2. BAD Loan Application   
3. Good Loan Funded Amount 3. BAD Loan Funded Amount4. Good Loan Total Received Amount 4. BAD Loan Total Received Amount

**Loan Status Grid View**In order to gain a comprehensive overview of our lending operations and monitor the performance of loans, we aim to create a grid view report categorized by ‘Loan Status’. By providing insights into metrics such as ‘Total Loan Applications’, ‘Total Funded Amount’, ‘Total Amount Received’, ‘Month-to-Date(MTD) Funded Amount, ‘MTD Amount Received’, ‘Average Interest Rate ‘and ‘Average Dept-to-income Ratio(DTI)’, this grid view will empower us to make data-driven decision and assess the health of your loan portfolio.

**DASHBOARD 2: OVERVIEW**

**CHARTS  
1. Monthly Trends by Issue Date (Line Chart)**: To identify seasonality and long-term trends in lending activities.  
  
**2. Regional Analysis by State (Filled Map):** To identify region with significant lending activity and assess regional disparities.  
  
**3. Loan Term Analysis (Donut Chart)**: To allow the client to understand the distribution of loans across various term lengths.  
  
**4. Employee Length Analysis (Bar Chart)**: How Lending metrics are distributed among borrowers with different employment lengths, helping us assess the impact of employment history on loan application.  
  
**5. Loan purpose breakdown (Bar Chart)**: Will provide a visual breakdown of loan metrics based on the stated purposes of loans, aiding in the understanding of the primary reasons borrowers seek financing.  
  
**6. Home Ownership Analysis (Tree Map)**: For a hierarchical view of how home ownership impacts loan applications and disbursements.  
  
***Metrics to be shown : ‘Total Loan Applications’, ‘Total Funded Amount’ and ‘Total Amount Received’***

**DASHBOARD 3: DETAILS**

**GRID**Need for a comprehensive ‘Details Dashboard’ that provides a consolidated view of all the essential information within our loan data. This Details Dashboard aims to offer a holistic snapshot of key loan-related metrics and data points, enabling users to access critical information efficiently.

**Objective:**The primary objective of the Details Dashboard is to provide a comprehensive and user-friendly interface for the accessing vital loan data. It will serve as a one-stop solution for users seeking detailed insights into our loan portfolio, borrower profiles and loan performance.

*-------------------------- STATEMENT END -----------------------------------*