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 Applications and track changes Month-over-Month (MoM).

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

3. **Total Amount Received**:
   Tracking the total amount received 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) variations in interest rates will provide insights into our lending portfolio's overall cost.

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

PROBLEM STATEMENT
DASHBOARD 1: SUMMARY

Good Loan v Bad Loan KPI's

Good Loan:

1. **Good Loan Application Percentage**

2. **Good Loan Applications**

3. **Good Loan Funded Amount**

4. **Good Loan Total Received Amount**

Bad Loan:

1. **Bad Loan Application Percentage**

2. **Bad Loan Applications**

3. **Bad Loan Funded 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 Debt-to-Income Ratio (DTI),' this grid view will empower us to make data-driven decisions and assess the health of our loan portfolio.

PROBLEM STATEMENT
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 regions 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 applications.

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'*