📊Bank Loan Report Queries

This document contains all the SQL queries used for generating the **Bank Loan Report** with key KPIs and dashboards.

🕰Summary KPIs

Total Loan Applications

```sql
SELECT COUNT(id) AS Total_Applications
FROM bank_loan_data;
```

MTD Loan Applications

```sql
SELECT COUNT(id) AS Total_Applications
FROM bank_loan_data
WHERE MONTH(issue_date) = 12;
```

PMTD Loan Applications

```sql
SELECT COUNT(id) AS Total_Applications
FROM bank_loan_data
WHERE MONTH(issue_date) = 11;
```

Total Funded Amount

```sql
SELECT SUM(loan_amount) AS Total_Funded_Amount
FROM bank_loan_data;
```

MTD Total Funded Amount

```sql
SELECT SUM(loan_amount) AS Total_Funded_Amount
FROM bank_loan_data
WHERE MONTH(issue_date) = 12;
```

PMTD Total Funded Amount

```sql
SELECT SUM(loan_amount) AS Total_Funded_Amount
FROM bank_loan_data
WHERE MONTH(issue_date) = 11;
```

Total Amount Received

```sql
SELECT SUM(total_payment) AS Total_Amount_Collected
FROM bank_loan_data;
```

MTD Total Amount Received

```sql
SELECT SUM(total_payment) AS Total_Amount_Collected
FROM bank_loan_data
WHERE MONTH(issue_date) = 12;
```

PMTD Total Amount Received

```sql
SELECT SUM(total_payment) AS Total_Amount_Collected
FROM bank_loan_data
WHERE MONTH(issue_date) = 11;
```

Average Interest Rate

```sql
SELECT AVG(int_rate) * 100 AS Avg_Int_Rate
FROM bank_loan_data;
```

MTD Average Interest

```sql
SELECT AVG(int_rate) * 100 AS MTD_Avg_Int_Rate
FROM bank_loan_data
WHERE MONTH(issue_date) = 12;
```

PMTD Average Interest

```sql
SELECT AVG(int_rate) * 100 AS PMTD_Avg_Int_Rate
FROM bank_loan_data
WHERE MONTH(issue_date) = 11;
```

Average DTI

```
SELECT AVG(dti) * 100 AS Avg_DTI
FROM bank_loan_data;
```

MTD Avg DTI

```
SELECT AVG(dti) * 100 AS MTD_Avg_DTI
FROM bank_loan_data
WHERE MONTH(issue_date) = 12;
```

PMTD Avg DTI

```
SELECT AVG(dti) * 100 AS PMTD_Avg_DTI
FROM bank_loan_data
WHERE MONTH(issue_date) = 11;
```

🔗 Good Loan Issued

Good Loan Percentage

```
SELECT
    (COUNT(CASE WHEN loan_status = 'Fully Paid' OR loan_status = 'Current'
THEN id END) * 100.0) / COUNT(id) AS Good_Loan_Percentage
FROM bank_loan_data;
```

Good Loan Applications

```
SELECT COUNT(id) AS Good_Loan_Applications
FROM bank_loan_data
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current';
```

Good Loan Funded Amount

```
SELECT SUM(loan_amount) AS Good_Loan_Funded_amount
FROM bank_loan_data
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current';
```

Good Loan Amount Received

```sql
SELECT SUM(total_payment) AS Good_Loan_amount_received
FROM bank_loan_data
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current';
```

🔩Bad Loan Issued

Bad Loan Percentage

```sql
SELECT
    (COUNT(CASE WHEN loan_status = 'Charged Off' THEN id END) * 100.0) /
COUNT(id) AS Bad_Loan_Percentage
FROM bank_loan_data;
```

Bad Loan Applications

```sql
SELECT COUNT(id) AS Bad_Loan_Applications
FROM bank_loan_data
WHERE loan_status = 'Charged Off';
```

Bad Loan Funded Amount

```sql
SELECT SUM(loan_amount) AS Bad_Loan_Funded_amount
FROM bank_loan_data
WHERE loan_status = 'Charged Off';
```

Bad Loan Amount Received

```sql
SELECT SUM(total_payment) AS Bad_Loan_amount_received
FROM bank_loan_data
WHERE loan_status = 'Charged Off';
```

📌Loan Status Report

```sql
SELECT
    loan_status,
    COUNT(id) AS LoanCount,
    SUM(total_payment) AS Total_Amount_Received,
    SUM(loan_amount) AS Total_Funded_Amount,
    AVG(int_rate * 100) AS Interest_Rate,
```

```sql
    AVG(dti * 100) AS DTI
FROM bank_loan_data
GROUP BY loan_status;
```

MTD Loan Status Report

```sql
SELECT
    loan_status,
    SUM(total_payment) AS MTD_Total_Amount_Received,
    SUM(loan_amount) AS MTD_Total_Funded_Amount
FROM bank_loan_data
WHERE MONTH(issue_date) = 12
GROUP BY loan_status;
```

📅 Overview Reports

By Month

```sql
SELECT
    MONTH(issue_date) AS Month_Number,
    DATENAME(MONTH, issue_date) AS Month_name,
    COUNT(id) AS Total_Loan_Applications,
    SUM(loan_amount) AS Total_Funded_Amount,
    SUM(total_payment) AS Total_Amount_Received
FROM bank_loan_data
GROUP BY MONTH(issue_date), DATENAME(MONTH, issue_date)
ORDER BY MONTH(issue_date);
```

By State

```sql
SELECT
    address_state AS State,
    COUNT(id) AS Total_Loan_Applications,
    SUM(loan_amount) AS Total_Funded_Amount,
    SUM(total_payment) AS Total_Amount_Received
FROM bank_loan_data
GROUP BY address_state
ORDER BY address_state;
```

By Term

```sql
SELECT
    term AS Term,
    COUNT(id) AS Total_Loan_Applications,
    SUM(loan_amount) AS Total_Funded_Amount,
```

```sql
    SUM(total_payment) AS Total_Amount_Received
FROM bank_loan_data
GROUP BY term
ORDER BY term;
```

By Employee Length

```sql
SELECT
    emp_length AS Employee_Length,
    COUNT(id) AS Total_Loan_Applications,
    SUM(loan_amount) AS Total_Funded_Amount,
    SUM(total_payment) AS Total_Amount_Received
FROM bank_loan_data
GROUP BY emp_length
ORDER BY emp_length;
```

By Purpose

```sql
SELECT
    purpose AS PURPOSE,
    COUNT(id) AS Total_Loan_Applications,
    SUM(loan_amount) AS Total_Funded_Amount,
    SUM(total_payment) AS Total_Amount_Received
FROM bank_loan_data
GROUP BY purpose
ORDER BY purpose;
```

By Home Ownership

```sql
SELECT
    home_ownership AS Home_Ownership,
    COUNT(id) AS Total_Loan_Applications,
    SUM(loan_amount) AS Total_Funded_Amount,
    SUM(total_payment) AS Total_Amount_Received
FROM bank_loan_data
GROUP BY home_ownership
ORDER BY home_ownership;
```

🕐 Example with Filter (Grade A)

```sql
SELECT
    purpose AS PURPOSE,
    COUNT(id) AS Total_Loan_Applications,
    SUM(loan_amount) AS Total_Funded_Amount,
    SUM(total_payment) AS Total_Amount_Received
```

```sql
FROM bank_loan_data
WHERE grade = 'A'
GROUP BY purpose
ORDER BY purpose;
```

```sql
FROM bank_loan_data
WHERE grade = 'A'
```