**BANK LOAN REPORT SQL QUERIES**

**Creating a Database**

create database loan\_db;

use loan\_db;

**Overview of Dataset**

select \* from bank\_loan;

**KPI’s**

**1. Total Loan Applications:**

SELECT COUNT(id) AS Total\_Applications FROM bank\_loan;

**2. MTD Loan Applications:**

SELECT COUNT(id) AS Total\_Applications FROM bank\_loan

WHERE MONTH(issue\_date) = 12;

**3. PMTD Loan Applications:**

SELECT COUNT(id) AS Total\_Applications FROM bank\_loan

WHERE MONTH(issue\_date) = 11;

**4. Total Funded Amount:**

SELECT SUM(loan\_amount) AS Total\_Funded\_Amount FROM bank\_loan;

**5. MTD Total Funded Amount:**

SELECT SUM(loan\_amount) AS Total\_Funded\_Amount FROM bank\_loan

WHERE MONTH(issue\_date) = 12;

**6. PMTD Total Funded Amount:**

SELECT SUM(loan\_amount) AS Total\_Funded\_Amount FROM bank\_loan

WHERE MONTH(issue\_date) = 11;

**7. Total Collected Amount:**

SELECT SUM(total\_payment) AS Total\_Collected\_Amount FROM bank\_loan;

**8. MTD Total Collected Amount:**

SELECT SUM(total\_payment) AS Total\_Collected\_Amount FROM bank\_loan

WHERE MONTH(issue\_date) = 12;

**9. PMTD Total Collected Amount:**

SELECT SUM(total\_payment) AS Total\_Collected\_Amount FROM bank\_loan

WHERE MONTH(issue\_date) = 11;

**10. Average Interest Rate:**

SELECT AVG(int\_rate)\*100 AS Avg\_Int\_Rate FROM bank\_loan;

**11. MTD Average Interest Rate:**

SELECT AVG(int\_rate)\*100 AS MTD\_Avg\_Int\_Rate FROM bank\_loan

WHERE MONTH(issue\_date) = 12;

**12. PMTD Average Interest Rate:**

SELECT AVG(int\_rate)\*100 AS MTD\_Avg\_Int\_Rate FROM bank\_loan

WHERE MONTH(issue\_date) = 11;

**Good Loan vs Bad Loan**

**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;

**Bad Loan Percentage**

SELECT

(COUNT(CASE WHEN loan\_status = "Charged off" THEN id END) \* 100.0) / COUNT(id) AS Bad\_Loan\_Percentage

FROM bank\_loan;

**CHARTS**

**1. Loan Term Analysis:**

SELECT

term AS Term,

COUNT(id) AS Total\_Loan\_Applications,

SUM(loan\_amount) AS Total\_Funded\_Amount,

SUM(total\_payment) AS Total\_Collected\_Amount

FROM bank\_loan

GROUP BY term

ORDER BY term;

**2. Regional Analysis by State:**

SELECT

address\_state AS State,

COUNT(id) AS Total\_Loan\_Applications,

SUM(loan\_amount) AS Total\_Funded\_Amount,

SUM(total\_payment) AS Total\_Collected\_Amount

FROM bank\_loan

GROUP BY address\_state

ORDER BY address\_state;

**3. Monthly Trends by Issue Date:**

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\_Collected\_Amount

FROM bank\_loan

GROUP BY MONTH(issue\_date), DATENAME(MONTH, issue\_date)

ORDER BY MONTH(issue\_date);

**4. Home Ownership Analysis:**

SELECT

home\_ownership AS Home\_Ownership,

COUNT(id) AS Total\_Loan\_Applications,

SUM(loan\_amount) AS Total\_Funded\_Amount,

SUM(total\_payment) AS Total\_Collected\_Amount

FROM bank\_loan

GROUP BY home\_ownership

ORDER BY home\_ownership;

**5. Employee Length Analysis:**

SELECT

emp\_length AS Employee\_Length,

COUNT(id) AS Total\_Loan\_Applications,

SUM(loan\_amount) AS Total\_Funded\_Amount,

SUM(total\_payment) AS Total\_Collected\_Amount

FROM bank\_loan

GROUP BY emp\_length

ORDER BY emp\_length;

**6. Loan Purpose Breakdown:**

SELECT

purpose AS PURPOSE,

COUNT(id) AS Total\_Loan\_Applications,

SUM(loan\_amount) AS Total\_Funded\_Amount,

SUM(total\_payment) AS Total\_Collected\_Amount

FROM bank\_loan

GROUP BY purpose

ORDER BY purpose;