**BANK LOAN REPORT QUERY DOCUMENT**

**Converting text date column → DATE (exact steps)**

**If Workbench imported last\_payment\_date or other date columns as text, use the pattern from your Query Doc to safely convert:**

SELECT \*

FROM financial\_loan;

ALTER TABLE financial\_loan

ADD COLUMN clast\_payment\_date DATE NULL;

UPDATE financial\_loan

SET clast\_payment\_date = STR\_TO\_DATE(`last\_payment\_date`, '%Y-%m-%d')

WHERE `last\_payment\_date` IS NOT NULL;

ALTER TABLE financial\_loan DROP COLUMN `last\_payment\_date`;

ALTER TABLE financial\_loan CHANGE clast\_payment\_date `last\_payment\_date` DATE;

1. **BANK LOAN REPORT | SUMMARY**

**KPI’s:**

**Total Loan Applications:**

**Total number of loan records in the dataset.**

SELECT COUNT(ID) AS Total\_Loan\_Applications FROM financial\_loan;



**MTD Loan Applications:**

**Month-to-date / previous-month-to-date counts (example uses specific month/year — make dynamic if needed).**

SELECT COUNT(id) AS Total\_Loan\_Applications FROM financial\_loan

WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



**PMTD Loan Applications**

SELECT COUNT(id) AS Total\_Loan\_Applications FROM financial\_loan

WHERE MONTH(issue\_date) = 11 AND YEAR(issue\_date) = 2021;



**Total Funded Amount:**

**Total principal funded by the lender.**

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

**MTD Total Funded Amount**

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

WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



**PMTD Total Funded Amount**

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

WHERE MONTH(issue\_date) = 11 AND YEAR(issue\_date) = 2021;



**Total Amount Received:**

**All payments received (sum of total\_payment).**

SELECT SUM(total\_payment) AS Total\_Amount\_Received FROM financial\_loan;

**MTD Total Amount Received**

SELECT SUM(total\_payment) AS Total\_Amount\_Received FROM financial\_loan

WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



**PMTD Total Amount Received**

SELECT SUM(total\_payment) AS Total\_Amount\_Received FROM financial\_loan

WHERE MONTH(issue\_date) = 11 AND YEAR(issue\_date) = 2021;



**Average Interest Rate:**

**Interest rate and debt-to-income averaged across loans (multiplied by 100 to express in percentage)**

SELECT AVG(int\_rate)\*100 AS Avg\_Interest\_Rate FROM financial\_loan;



**MTD Average Interest**

SELECT AVG(int\_rate)\*100 AS MTD\_Avg\_Interest\_Rate FROM financial\_loan

WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



**PMTD Average Interest**

SELECT AVG(int\_rate)\*100 AS PMTD\_Avg\_Interest\_Rate FROM financial\_loan

WHERE MONTH(issue\_date) = 11 AND YEAR(issue\_date) = 2021;



**Avg DTI**

SELECT AVG(dti)\*100 AS Avg\_DTI FROM financial\_loan;



**MTD Avg DTI**

SELECT AVG(dti)\*100 AS MTD\_Avg\_DTI FROM financial\_loan

WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



**PMTD Avg DTI**

SELECT AVG(dti)\*100 AS PMTD\_Avg\_DTI FROM financial\_loan

WHERE MONTH(issue\_date) = 11 AND YEAR(issue\_date) = 2021;



**GOOD LOAN ISSUED**

**Good Loan Percentage**

* **Good loans = loan\_status IN (Fully Paid, Current)**
* **Bad loans = loan\_status = Charged Off**

SELECT

(COUNT(CASE WHEN loan\_status = 'Fully Paid' OR loan\_status = 'Current' THEN id END)\*100)

/

COUNT(id) AS Good\_loan\_percentage

FROM financial\_loan;

****

**Good Loan Applications**

SELECT COUNT(id) AS Good\_Loan\_Applications FROM financial\_loan

WHERE loan\_status = 'Fully Paid' OR loan\_status = 'Current';

****

**Good Loan Funded Amount**

SELECT SUM(loan\_amount) AS Good\_Loan\_Funded\_Amount FROM financial\_loan

WHERE loan\_status = 'Fully Paid' OR loan\_status = 'Current'; ****

**Good Loan Amount Received**

SELECT SUM(total\_payment) AS Good\_Loan\_Recieced\_Amount FROM financial\_loan

WHERE loan\_status = 'Fully Paid' OR loan\_status = 'Current'; ****

**BAD LOAN ISSUED**

**Bad Loan Percentage**

SELECT

(COUNT(CASE WHEN loan\_status = 'Charged Off' THEN id END)\*100)

/

COUNT(id) AS Bad\_Loan\_Percentage

FROM financial\_loan;

****

**Bad Loan Applications**

SELECT COUNT(id) AS Bad\_Loan\_Applications FROM financial\_loan

WHERE loan\_status = 'Charged Off';

****

**Bad Loan Funded Amount**

SELECT SUM(loan\_amount) AS Bad\_Loan\_Funded\_amount FROM financial\_loan

WHERE loan\_status = 'Charged Off';

****

**Bad Loan Amount Received**

SELECT SUM(total\_payment) AS Bad\_Loan\_Funded\_Recieved FROM financial\_loan

WHERE loan\_status = 'Charged Off';

****

**LOAN STATUS**

SELECT

loan\_status,

COUNT(id) AS Total\_Loan\_Applications,

SUM(total\_payment) AS Total\_Amount\_Received,

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

AVG(int\_rate \* 100) AS Interest\_Rate,

AVG(dti \* 100) AS DTI

FROM financial\_loan

GROUP BY loan\_status;

****

SELECT

loan\_status,

SUM(total\_payment) AS MTD\_Total\_Amount\_Received,

SUM(loan\_amount) AS MTD\_Total\_Funded\_Amount

FROM financial\_loan

WHERE MONTH(issue\_date) = 12

GROUP BY loan\_status;****

1. **BANK LOAN REPORT | OVERVIEW**

**MONTH**

SELECT

DATE(MONTH,issue\_date),

COUNT(id) AS Total\_Loan\_Applications,

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

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

FROM financial\_loan

GROUP BY DATE(MONTH,issue\_date)

ORDER BY DATE(MONTH,issue\_date);

****

**STATE**

SELECT

address\_state,

COUNT(id) AS Total\_Loan\_Applications,

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

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

FROM financial\_loan

GROUP BY address\_state****

**TERM**

SELECT

Term AS Term,

COUNT(id) AS Total\_Loan\_Applications,

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

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

FROM financial\_loan

GROUP BY term

ORDER BY term;****

**EMPLOYEE LENGTH**

SELECT

emp\_length AS Employee\_Length,

COUNT(id) AS Total\_Loan\_Applications,

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

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

FROM financial\_loan

GROUP BY emp\_length

ORDER BY emp\_length;****

**PURPOSE**

SELECT

purpose AS PURPOSE,

COUNT(id) AS Total\_Loan\_Applications,

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

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

FROM financial\_loan

GROUP BY purpose

ORDER BY purpose;

****

**HOME OWNERSHIP**

SELECT

home\_ownership AS Home\_Ownership,

COUNT(id) AS Total\_Loan\_Applications,

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

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

FROM financial\_loan

GROUP BY home\_ownership

ORDER BY home\_ownership;****