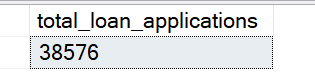
**Bank loan report query doc**

1. Bank loan applications

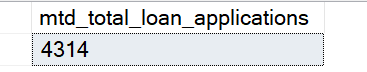
SELECT COUNT(id) AS total\_loan\_applications FROM bank\_loan\_data;



1. MTD loan applications

SELECT COUNT(id) AS mtd\_total\_loan\_applications FROM bank\_loan\_data

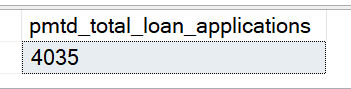
WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



1. PMTD loan applications

SELECT COUNT(id) AS pmtd\_total\_loan\_applications FROM bank\_loan\_data

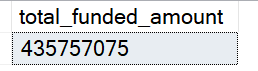
WHERE MONTH(issue\_date) = 11 AND YEAR(issue\_date) = 2021;



--to calculate MoM = (MTD-PMTD)/PMTD

1. Total funded (loan) amount

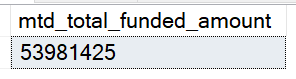
SELECT SUM(loan\_amount) AS total\_funded\_amount FROM bank\_loan\_data;



1. MTD total loan amount

SELECT SUM(loan\_amount) AS mtd\_total\_funded\_amount FROM bank\_loan\_data

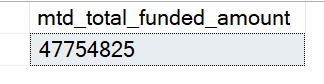
WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



1. PMTD total loan amount

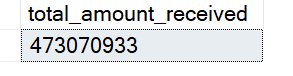
SELECT SUM(loan\_amount) AS mtd\_total\_funded\_amount FROM bank\_loan\_data

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



1. Total amount received (payment)

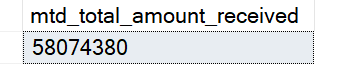
SELECT SUM(total\_payment) AS total\_amount\_received FROM bank\_loan\_data;



1. MTD amount received (payment)

SELECT SUM(total\_payment) AS mtd\_total\_amount\_received FROM bank\_loan\_data

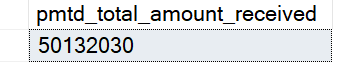
WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



1. PMTD amount received (payment)

SELECT SUM(total\_payment) AS pmtd\_total\_amount\_received FROM bank\_loan\_data

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



1. Average interest rate

SELECT ROUND(AVG(int\_rate), 4) \* 100 AS avg\_interest\_rate FROM bank\_loan\_data;



1. MTD Average interest rate

SELECT ROUND(AVG(int\_rate), 4) \* 100 AS mtd\_avg\_interest\_rate FROM bank\_loan\_data

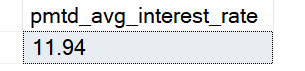
WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



1. PMTD Average interest rate

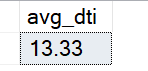
SELECT ROUND(AVG(int\_rate), 4) \* 100 AS pmtd\_avg\_interest\_rate FROM bank\_loan\_data

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



1. Average debt-to-income ratio (DTI)

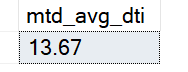
SELECT ROUND(AVG(dti), 4) \* 100 AS avg\_dti FROM bank\_loan\_data;



1. MTD average debt-to-income ratio (DTI)

SELECT ROUND(AVG(dti), 4) \* 100 AS mtd\_avg\_dti FROM bank\_loan\_data

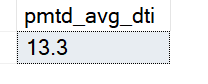
WHERE MONTH(issue\_date) = 12 AND YEAR(issue\_date) = 2021;



1. PMTD average debt-to-income ratio (DTI)

SELECT ROUND(AVG(dti), 4) \* 100 AS pmtd\_avg\_dti FROM bank\_loan\_data

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



Good loan vs. Bad loan KPI’s

1. Good loan application percentage

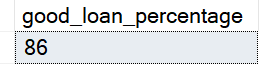
SELECT

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

/

COUNT(id) AS good\_loan\_percentage

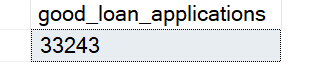
FROM bank\_loan\_data;



1. Total number of good loan applications

SELECT COUNT(id) AS good\_loan\_applications FROM bank\_loan\_data

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



1. Good loan funded amount

SELECT SUM(loan\_amount) AS good\_loan\_funded\_amount FROM bank\_loan\_data

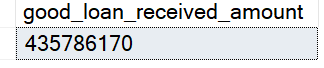
WHERE loan\_status = 'Fully Paid' OR loan\_status = 'Current';



1. Good loan total received amount

SELECT SUM(total\_payment) AS good\_loan\_received\_amount FROM bank\_loan\_data

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



1. Bad loan application percentage

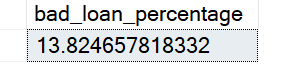
SELECT

(COUNT(CASE WHEN loan\_status = 'Charged Off' THEN id END) \* 100.0)

/

COUNT(id) AS bad\_loan\_percentage

FROM bank\_loan\_data;



1. Total number of bad loan applications

SELECT COUNT(id) AS bad\_loan\_applications FROM bank\_loan\_data

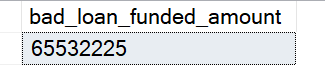
WHERE loan\_status = 'Charged Off';



1. Bad loan funded amount

SELECT SUM(loan\_amount) AS bad\_loan\_funded\_amount FROM bank\_loan\_data

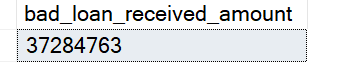
WHERE loan\_status = 'Charged Off';



1. Bad loan total received amount

SELECT SUM(total\_payment) AS bad\_loan\_received\_amount FROM bank\_loan\_data

WHERE loan\_status = 'Charged Off';



Loan status grid view

1. Loan status

SELECT

loan\_status,

COUNT(id) AS total\_loan\_applications,

SUM(total\_payment) AS total\_amount\_received,

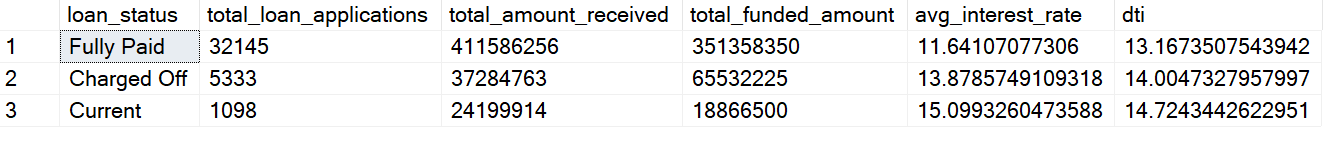
SUM(loan\_amount) AS total\_funded\_amount,

AVG(int\_rate \* 100) AS avg\_interest\_rate,

AVG(dti \* 100) AS dti

FROM bank\_loan\_data

GROUP BY loan\_status;



1. MTD loan status

SELECT

loan\_status,

COUNT(id) AS mtd\_total\_loan\_applications,

SUM(total\_payment) AS mtd\_total\_amount\_received,

SUM(loan\_amount) AS mtd\_total\_funded\_amount,

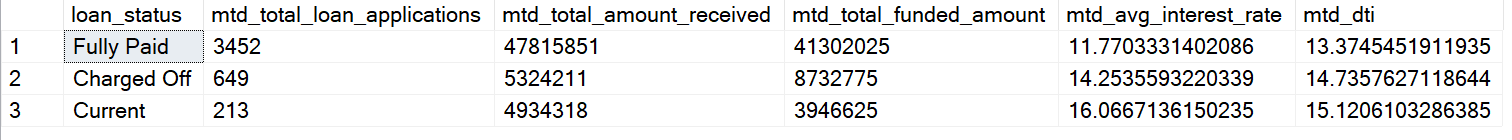
AVG(int\_rate \* 100) AS mtd\_avg\_interest\_rate,

AVG(dti \* 100) AS mtd\_dti

FROM bank\_loan\_data

WHERE MONTH(issue\_date) = 12

GROUP BY loan\_status;



DASHBOARD #2

1. Monthly trend by issue date

SELECT

MONTH(issue\_date) AS month\_number,

DATENAME(MONTH, issue\_date) AS month\_name,

COUNT(id) AS total\_loan\_applications,

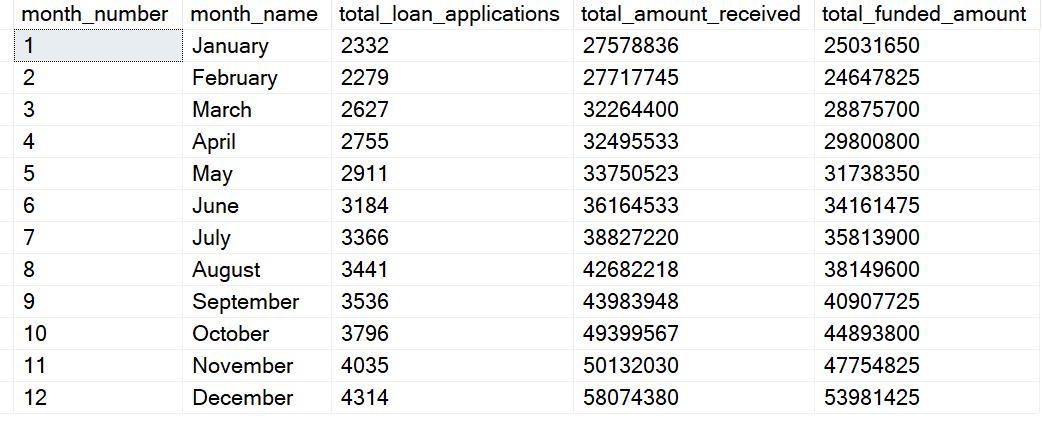
SUM(total\_payment) AS total\_amount\_received,

SUM(loan\_amount) AS total\_funded\_amount

FROM bank\_loan\_data

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

ORDER BY MONTH(issue\_date);



1. Regional analysis by state

SELECT

address\_state,

COUNT(id) AS total\_loan\_applications,

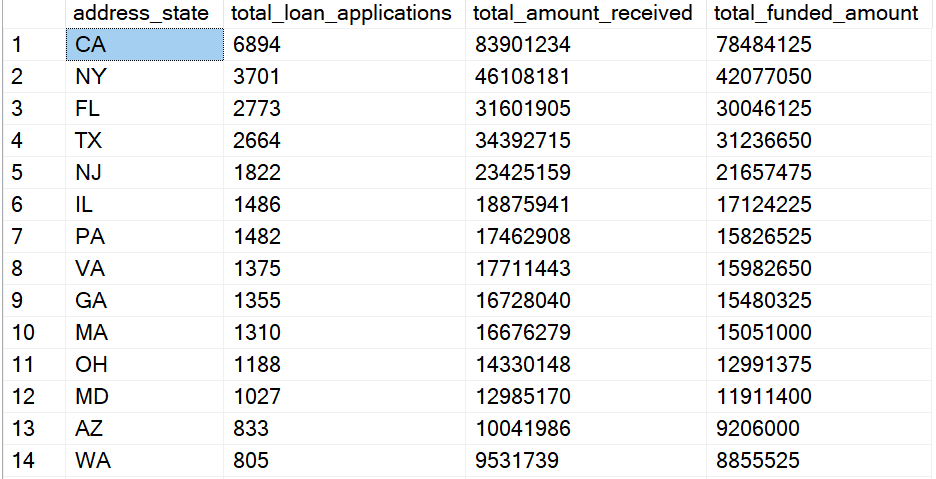
SUM(total\_payment) AS total\_amount\_received,

SUM(loan\_amount) AS total\_funded\_amount

FROM bank\_loan\_data

GROUP BY address\_state

ORDER BY COUNT(id) DESC;



1. Loan term analysis

SELECT

term,

COUNT(id) AS total\_loan\_applications,

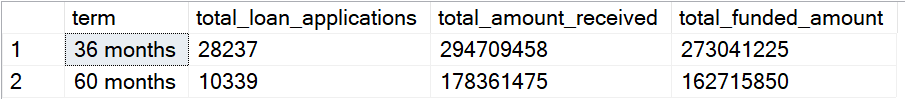
SUM(total\_payment) AS total\_amount\_received,

SUM(loan\_amount) AS total\_funded\_amount

FROM bank\_loan\_data

GROUP BY term

ORDER BY term;



1. Employee length analysis

SELECT

emp\_length,

COUNT(id) AS total\_loan\_applications,

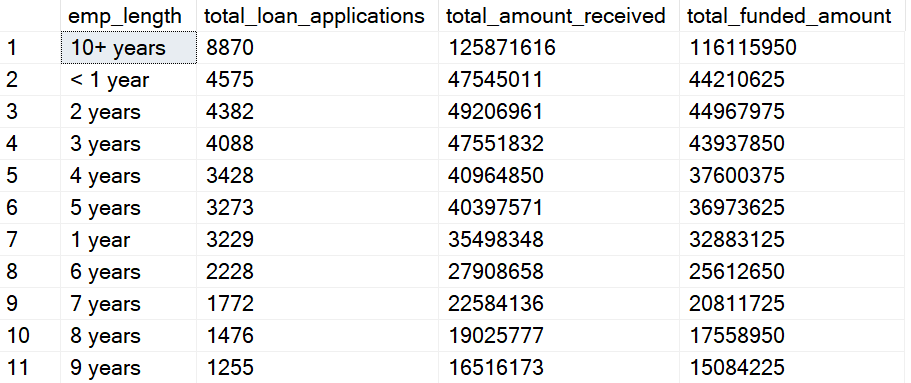
SUM(total\_payment) AS total\_amount\_received,

SUM(loan\_amount) AS total\_funded\_amount

FROM bank\_loan\_data

GROUP BY emp\_length

ORDER BY COUNT(id) DESC;



1. Loan purpose breakdown

SELECT

purpose,

COUNT(id) AS total\_loan\_applications,

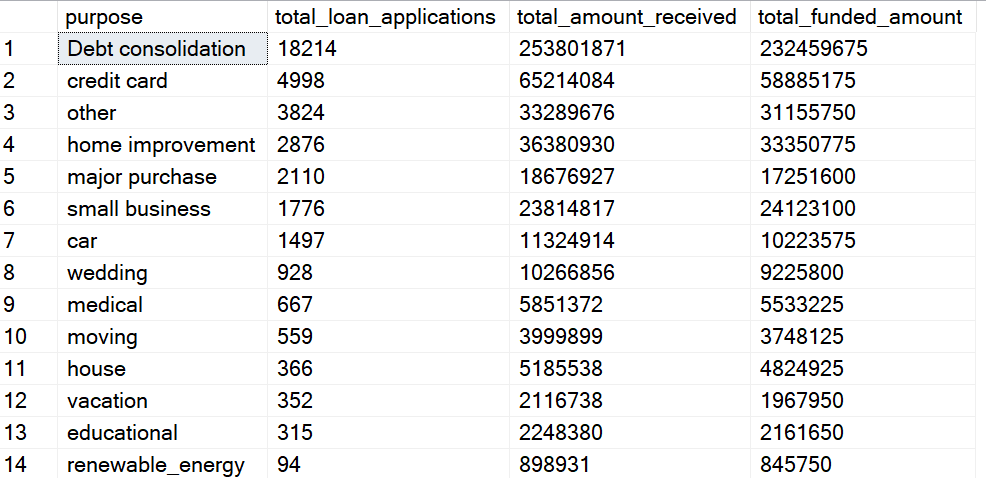
SUM(total\_payment) AS total\_amount\_received,

SUM(loan\_amount) AS total\_funded\_amount

FROM bank\_loan\_data

GROUP BY purpose

ORDER BY COUNT(id) DESC;



1. Homeownership analysis

SELECT

home\_ownership,

COUNT(id) AS total\_loan\_applications,

SUM(total\_payment) AS total\_amount\_received,

SUM(loan\_amount) AS total\_funded\_amount

FROM bank\_loan\_data

GROUP BY home\_ownership

ORDER BY COUNT(id) DESC;

