**Bank Loan Analysis**

Agenda: To gain a thorough understanding of our lending operations and track loan performance, I designed a grid view report segmented by 'Loan Status.' This report provides valuable insights into key metrics such as 'Total Loan Applications,' 'Total Funded Amount,' 'Total Amount Repaid,' 'Month-to-Date (MTD) Funded Amount,' 'MTD Amount Repaid,' 'Average Interest Rate,' and 'Average Debt-to-Income (DTI) Ratio.' By delivering these metrics, this report enables data-driven decision-making and helps assess the overall health of our loan portfolio.

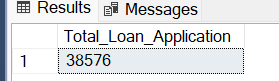
SQL Commands:

Sql Query to Fetch the data

KPI’S

Total Loan Application:

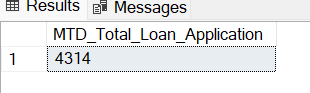
. Select COUNT(id ) As Total\_Loan\_Application from "Bank\_Loan\_Data "



MTD Loan Applications (Month To Date )

. Select COUNT(id ) As MTD\_Total\_Loan\_Application from "Bank\_Loan\_Data "

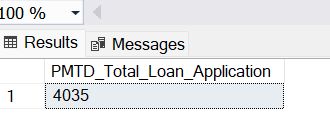
Where MONTH(issue\_date) = 12 And YEAR (issue\_date) =2021



Previous month loan Application :

. Select COUNT(id ) As PMTD\_Total\_Loan\_Application from "Bank\_Loan\_Data "

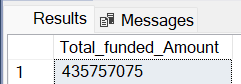
Where MONTH(issue\_date) = 11 And YEAR (issue\_date) =2021





Total Funded Amount:

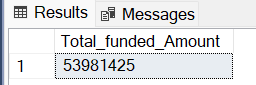
. Select SUM (loan\_amount) As Total\_funded\_Amount from "Bank\_Loan\_Data ";



Total Funded Amount MTD(Month To date ):

Select SUM (loan\_amount) As MTD\_Total\_funded\_Amount from "Bank\_Loan\_Data "

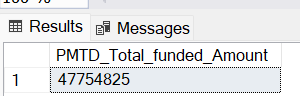
Where MONTH (issue\_date) = 12 And YEAR (issue\_date) = 2021;



Total Funded Amount PMTD( Previous Month To date ):

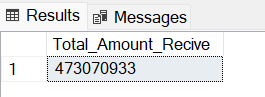
Select SUM (loan\_amount) As PMTD\_Total\_funded\_Amount from "Bank\_Loan\_Data "

Where MONTH (issue\_date) = 11 And YEAR (issue\_date) = 2021;



Total Amount Received:

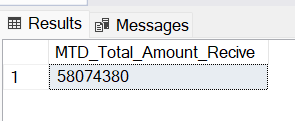
Select SUM (total\_payment) As Total\_Amount\_Recive From "Bank\_Loan\_Data ";



Total Amount received month To Date :

. Select SUM (total\_payment) As MTD\_Total\_Amount\_Recive From "Bank\_Loan\_Data "

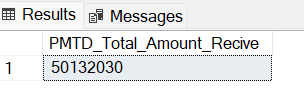
Where MONTH(issue\_date) = 12 And year (issue\_date) = 2021;



Total Amount received Previous month To Date:

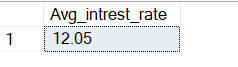
Select SUM (total\_payment) As PMTD\_Total\_Amount\_Recive From "Bank\_Loan\_Data "

Where MONTH(issue\_date) = 11 And year (issue\_date) = 2021;



Average interest rate :

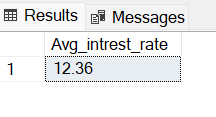
Select Round( AVG (int\_Rate),4) \*100 As Avg\_intrest\_rate From "Bank\_Loan\_Data";



Average interest rate Month to date:

Select Round( AVG (int\_Rate),4) \*100 As MTD\_Avg\_intrest\_rate From "Bank\_Loan\_Data"

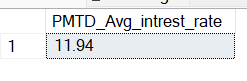
Where MONTH (issue\_date) =12 And Year (issue\_date) = 2021;



Average interest rate Previous Month to date:

.Select Round( AVG (int\_Rate),4) \*100 As PMTD\_Avg\_intrest\_rate From "Bank\_Loan\_Data"

Where MONTH (issue\_date) =11 And Year (issue\_date) = 2021;



Average DTI :

. Select Round (AVG (dti) ,4 ) \*100 As Average\_MTD\_DTI from "Bank\_Loan\_Data";



Average DTI \_Month To date (MTD) :

. Select Round (AVG (dti) ,4 ) \*100 As Average\_MTD\_DTI from "Bank\_Loan\_Data"

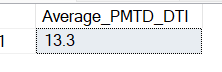
Where MONTH (issue\_date) =12 And YEAR (issue\_date) =2021;



Average DTI \_previous\_Month To date (PMTD) :

Select Round (AVG (dti) ,4 ) \*100 As Average\_PMTD\_DTI from "Bank\_Loan\_Data"

Where MONTH (issue\_date) =11 And YEAR (issue\_date) =2021;

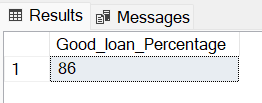


Good\_Loan\_Precentage:

. 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 "



Good Loan Application :

. Select COUNT (id) AS Good\_Loan\_Application from Bank\_Loan\_Data

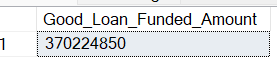
WHERE loan\_status = 'Fully Paid' OR loan\_status = 'Current';



Good Loan Funded Amount:

. Select Sum (loan\_amount) AS Good\_Loan\_Funded\_Amount from Bank\_Loan\_Data

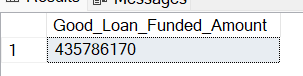
WHERE loan\_status = 'Fully Paid' OR loan\_status = 'Current';



Good Loan Total Received Amount :

. Select Sum (total\_payment) AS Good\_Loan\_Total\_Payment\_Recived from Bank\_Loan\_Data

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

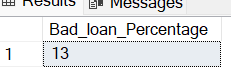


Bad Loan Percentage:

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

/COUNT(id) As Bad\_loan\_Percentage

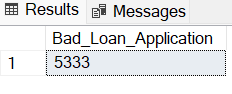
From "Bank\_Loan\_Data "



Bad Loan Application:

. Select COUNT ((id) )As Bad\_Loan\_Application from "Bank\_Loan\_Data"

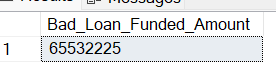
WHERE loan\_status ='charged off'



Bad Loan Funded Amount:

. Select Sum ((loan\_amount) )As Bad\_Loan\_Funded\_Amount from "Bank\_Loan\_Data"

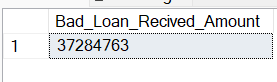
WHERE loan\_status ='charged off'



Total Amount Received from Bad Loan:

. Select Sum ((total\_payment) )As Bad\_Loan\_Recived\_Amount from "Bank\_Loan\_Data"

WHERE loan\_status ='charged off'



Loan Status:

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,

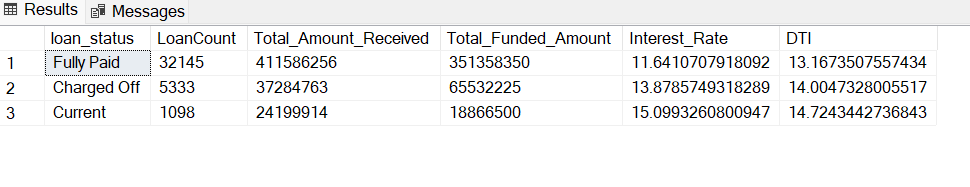
AVG(dti \* 100) AS DTI

FROM

bank\_loan\_data

GROUP BY

loan\_status



Sum of payment Received on current Month (December)

SELECT

loan\_status,

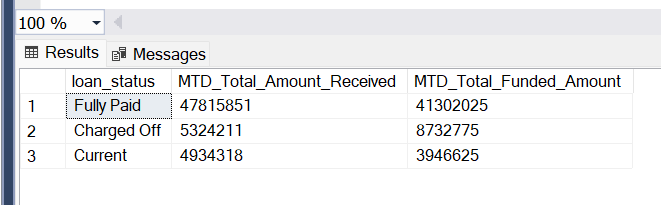
SUM(total\_payment) AS MTD\_Total\_Amount\_Received,

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

FROM bank\_loan\_data

WHERE MONTH(issue\_date) = 12

GROUP BY loan\_status



Bank loan report on monthly basis:

. SELECT

MONTH(issue\_date) AS Month\_Name,

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

COUNT(id) AS Total\_Loan\_Applications,

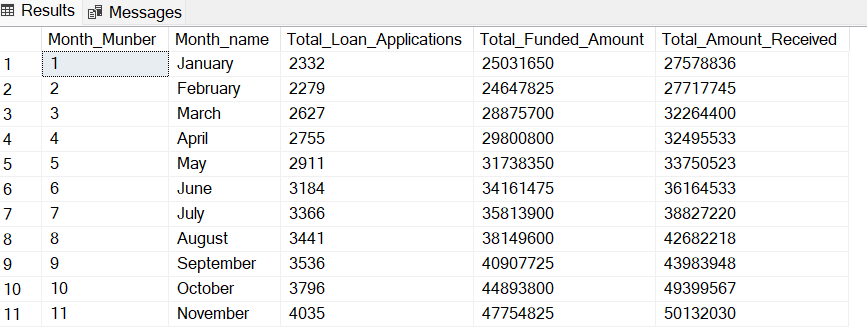
SUM(loan\_amount) AS Total\_Funded\_Amount,

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)



Bank Loan Report on address basis

. SELECT

address\_state AS State,

COUNT(id) AS Total\_Loan\_Applications,

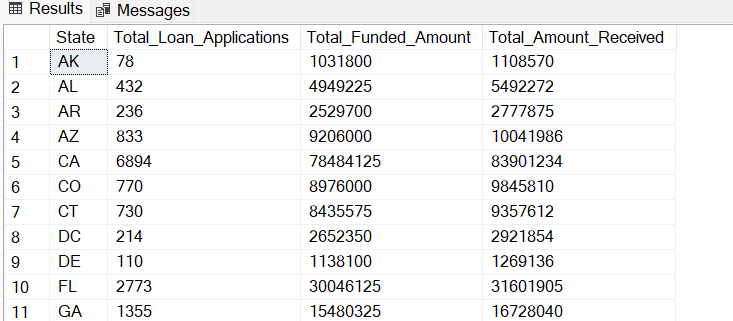
SUM(loan\_amount) AS Total\_Funded\_Amount,

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

FROM bank\_loan\_data

GROUP BY address\_state

ORDER BY address\_state



Bank Loan Report on Term basis

. SELECT

term AS Term,

COUNT(id) AS Total\_Loan\_Applications,

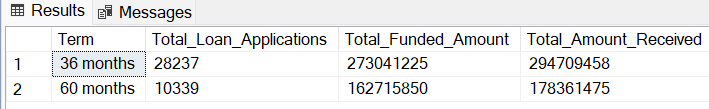
SUM(loan\_amount) AS Total\_Funded\_Amount,

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

FROM bank\_loan\_data

GROUP BY term

ORDER BY term



Employee Length :

SELECT

emp\_length AS Employee\_Length,

COUNT(id) AS Total\_Loan\_Applications,

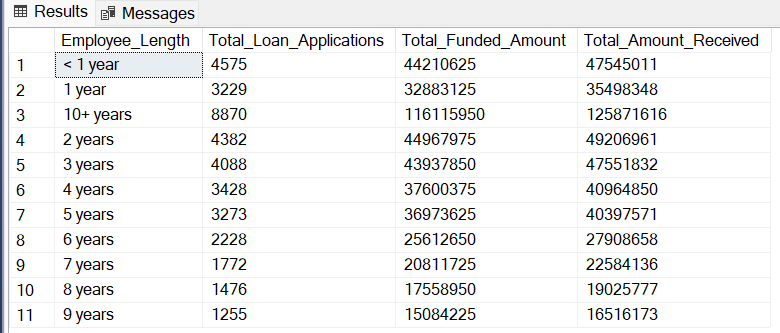
SUM(loan\_amount) AS Total\_Funded\_Amount,

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

FROM bank\_loan\_data

GROUP BY emp\_length

ORDER BY emp\_length



Purpose:

SELECT

purpose AS PURPOSE,

COUNT(id) AS Total\_Loan\_Applications,

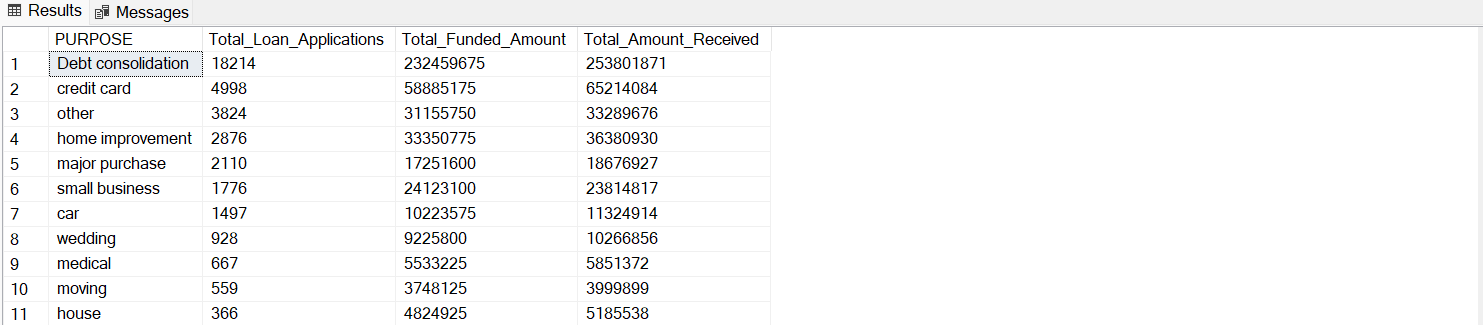
SUM(loan\_amount) AS Total\_Funded\_Amount,

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

FROM bank\_loan\_data

GROUP BY purpose

ORDER BY COUNT(id) DESC



Home Ownership:

SELECT

home\_ownership AS Home\_Ownership,

COUNT(id) AS Total\_Loan\_Applications,

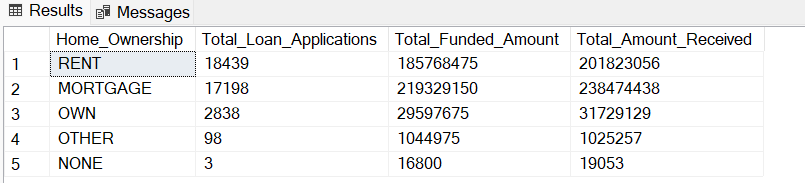
SUM(loan\_amount) AS Total\_Funded\_Amount,

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

FROM bank\_loan\_data

GROUP BY home\_ownership

ORDER BY COUNT (id) DESC



Technical insight: The main goal of the Details Dashboard is to offer an intuitive and comprehensive interface for accessing essential loan data. It acts as a centralized platform for users to obtain in-depth insights into our loan portfolio, borrower profiles, and loan performance.