**FINANCE / BANK LOAN REPORT SQL QUERY DOC**

**KPI’s:**

Loan Applications:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Total Loan Application

select distinct count(id) as Total\_Loan\_Application from finance\_loan



MTD Loan application

select count(id) as MTD\_Loan\_Appoliaction from finance\_loan

where month(issue\_date) = 12

A close up of a sign

Description automatically generated

Number of loan applications Monthly i.e., MTD Loan Application

select date\_format(issue\_date,"%M") as Months, count(\*) as MTD\_Loan\_Application from finance\_loan group by Months order by MTD\_Loan\_Application

A screenshot of a computer

Description automatically generated

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Loan Amount Funded:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Total Amount Funded as Laon

select sum(loan\_amount) as Total\_Fund\_Amount from finance\_loan;



MTD Amount Funded

select sum(loan\_amount) as MTD\_Total\_Fund\_Amount from finance\_loan

where month(issue\_date) = 12



Total amount funded in each month

select date\_format(issue\_date,"%m") as month\_num, sum(loan\_amount) as MTD\_Total\_Funded\_Amount from finance\_loan

group by month\_num order by month\_num

A screenshot of a computer

Description automatically generated

Loan Payment Received:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Total Payment received from borrower.

select sum(total\_payment) as Total\_Payment\_Recieved from finance\_loan;

A close up of a number

Description automatically generated

current MTD Payment received.

select sum(total\_payment) as MTD\_Total\_Payment\_Recieved from finance\_loan

where month(issue\_date) = 12

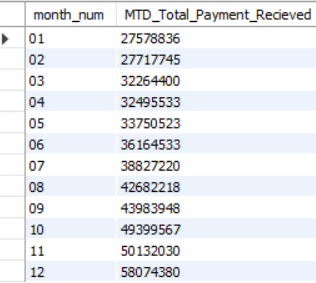


Total amount received in each month based on the date the loan application was issued.

select date\_format(issue\_date,"%m") as month\_num, sum(total\_payment) as MTD\_Total\_Payment\_Recieved from finance\_loan

group by month\_num

order by month\_num;



\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average Interest Rate/DTI:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fetch min interest rate, max interest rate, Average interest rate %

select round(min(int\_rate) \*100,2) Minimum\_interest\_rate, round(max(int\_rate)\*100,2) as Maximum\_interest\_rate,

round(avg(int\_rate) \*100,2) as Average\_interest\_rate from finance\_loan;



current MTD Average Interest

select round(avg(int\_rate)\*100,2) as MTD\_Average\_interest\_rate from finance\_loan

where month(issue\_date) = 12



-- PMTD Average Interest

select round(avg(int\_rate) \*100,2) as PMTD\_Average\_interest\_rate from finance\_loan

where month(issue\_date) = 11



DTI:

-- Fetch min dti, max dti, Average dti in given set

select round(min(dti),4) debt\_income\_ratio, round(max(dti),4) as debt\_income\_ratio,

round(avg(dti),4) as debt\_income\_ratio from finance\_loan



current MTD Average DTI

select round(avg(dti),4) MTD\_debt\_income\_ratio from finance\_loan

where month(issue\_date) = 12;



PMTD Average DTI

select round(avg(dti),4) PMTD\_debt\_income\_ratio from finance\_loan

where month(issue\_date) = 11

A close-up of a computer code

Description automatically generated

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**NOTE: - A good loan is a loan where the borrower consistently meets the payment obligations, whereas the bad loan is a loan where borrowers struggle to make payment one time.**

Good Loan:

Count of good loan application and Percentage of good loan application

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

AS good\_loan\_percentage FROM finance\_loan;



select count(id) as count\_good\_loan\_application from finance\_loan

where loan\_status="fully paid" or loan\_status="current"

A computer screen shot of a message

Description automatically generated

Total Good loan amount funded by lender

select sum(loan\_amount) as Good\_Loan\_Amount\_Funded from finance\_loan

where loan\_status="fully paid" or loan\_status="current"

Total Good loan payment recieved from borrower

select sum(total\_payment) as Good\_Loan\_Payment\_Recieved from finance\_loan

where loan\_status="fully paid" or loan\_status="current";



Bad Loan:

Count of bad loan application and Percentage of bad loan application

SELECT (COUNT (CASE WHEN loan\_status = "charged off" THEN id END) \* 100) / COUNT(id)

AS bad\_loan\_percentage FROM finance\_loan;



select count(id) as count\_bad\_loan\_application from finance\_loan

where loan\_status in ("charged off");

A close-up of a sign

Description automatically generated

Total Bad loan amount funded by lender

select sum(loan\_amount) as Bad\_Loan\_Amount\_Funded from finance\_loan

where loan\_status="charged off”



Total Bad loan payment received from borrower.

select sum(total\_payment) as Bad\_Loan\_Payment\_Recieved from finance\_loan

where loan\_status="charged off”

A close up of a sign

Description automatically generated

count of application, Amount by lender, Payment Received based on Loan status with Avg interest rate % and Avg DTI %

select loan\_status,count(id) as Loan\_Application, round(Avg(int\_rate)\*100,4) as Avg\_Interest\_Rate, round (Avg(dti)\*100,4) as Avg\_dti\_rate, Sum(loan\_amount) as Amount\_Funded, sum(total\_payment) as Payment\_Recieved from finance\_loan

group by loan\_status;

A screenshot of a computer

Description automatically generated

Bank Loan report overview based on purpose.

select purpose, round(avg(int\_rate) \*100,2) as Avg\_Interest\_Rate,

round(avg(dti)\*100,2) as Avg\_Dti\_Rate, count(id) as Loan\_Application,

sum(loan\_amount) as Amount\_Funded, sum(total\_payment) as payment\_Recieved

from finance\_loan

(NOTE: -\*\*add where condition; like where grade="A1" etc.\*\*)

group by purpose

A screenshot of a data

Description automatically generated

Bank Loan report overview based on home ownership.

select home\_ownership, round(avg(int\_rate) \*100,2) as Avg\_Interest\_Rate,

round(avg(dti)\*100,2) as Avg\_Dti\_Rate, count(id) as Loan\_Application,

sum(loan\_amount) as Amount\_Funded, sum(total\_payment) as payment\_Recieved

from finance\_loan

group by home\_ownership

A screenshot of a computer

Description automatically generated

Bank Loan report overview based on Employee Job lenght

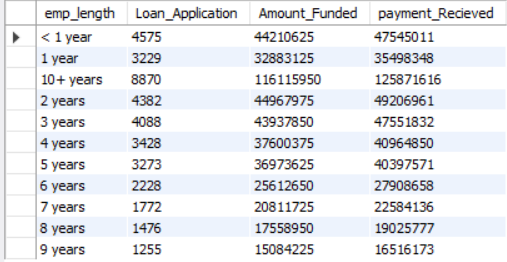
select emp\_length, count(id) as Loan\_Application,

sum(loan\_amount) as Amount\_Funded, sum(total\_payment) as payment\_Recieved

from finance\_loan

group by emp\_length

order by emp\_length



Loan status metric: -

(We can switch to other values of loan status in same query

we can add where condition also to filter result based on purpose etc.)

select count(id) as Total\_Loan\_Application,

count (case when loan\_status= 'charged off' then id end) as Total\_Chargedoff\_Application, (count (case when loan\_status= 'charged off' then id end) \*100) /count(id) as Total\_Chargedoff\_Application\_Percent

from finance\_loan



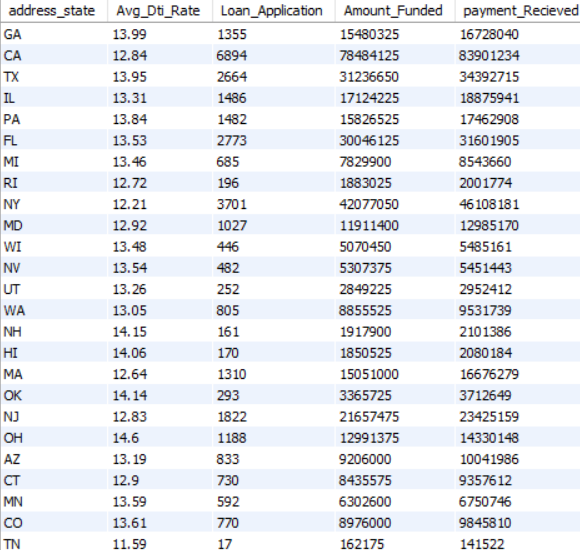
Bank Loan report overview-based on state: -

select address\_state, round(avg(dti)\*100,2) as Avg\_Dti\_Rate, count(id) as Loan\_Application, sum(loan\_amount) as Amount\_Funded, sum(total\_payment)as payment\_Recieved

from finance\_loan

(can also add where condition like; where home\_ownership="Rent")

group by address\_state



A table of numbers with numbers on it

Description automatically generated