**FINANCE DOMAIN**

BANK LOAN DATA ANALYSIS

***TOTAL LOAN APPLICATIONS:***

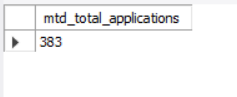
1. Calculate total number of loan applications received during a specific period

select count(\*) as total\_applications from bank\_loan\_data;



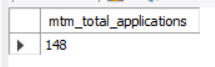
1. Month to date total loan applications received

select count(\*) as mtd\_total\_applications from bank\_loan\_data where month(issue\_date)=12 and year(issue\_date)=2021;



1. Month to month total loan applications received

select count(\*) as mtm\_total\_applications from bank\_loan\_data where month(issue\_date)=11 and year(issue\_date)=2021;



***TOTAL FUNDED AMOUNT:***

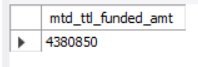
1)Total loan amount funded to the customers

select sum(loan\_amount) as total\_funded\_amount from bank\_loan\_data;



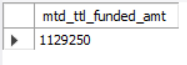
2)Month to date total amount funded to the customers

select sum(loan\_amount) as mtd\_ttl\_funded\_amt from bank\_loan\_data where year(issue\_date)= 2021 and month(issue\_date)= 12;



3)Month over month total amount funded to the customers

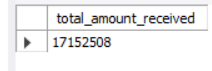
select sum(loan\_amount) as mtd\_ttl\_funded\_amt from bank\_loan\_data where year(issue\_date)= 2021 and month(issue\_date)= 11;



***TOTAL AMOUNT RECEIVED:***

1)Total amount received from borrowers

select sum(total\_payment) as total\_amount\_received from bank\_loan\_data;

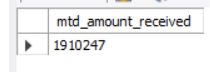


2)Month to date total amount received from borrowers

select sum(total\_payment) as mtd\_amount\_received

from bank\_loan\_data where year(last\_payment\_date)=2021

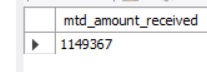
and month(last\_payment\_date)=12;



3)Month over month total amount received from borrowers

select sum(total\_payment) as mtd\_amount\_received from bank\_loan\_data where year(last\_payment\_date)=2021 and

month(last\_payment\_date)=11;



***AVERAGE INTEREST RATE:***

1)Average interest rate

select round(avg(int\_rate)\*100,4) as avg\_interest from bank\_loan\_data;

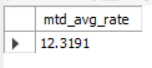


2)Month to Date average interest rate

select round(avg(int\_rate)\*100,4) as mtd\_avg\_rate

from bank\_loan\_data where year(issue\_date)=2021

and month(issue\_date)=12;

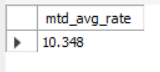


3)Month over Month average interest rate

select round(avg(int\_rate)\*100,4) as mtd\_avg\_rate

from bank\_loan\_data where year(issue\_date)=2021

and month(issue\_date)=11;

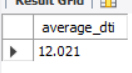


***AVERAGE DEBT-TO-INCOME:***

1)average debt to income

select round(avg(dti)\*100, 3) as average\_dti from

bank\_loan\_data;

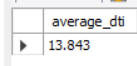


2)Month to Date average debt to income

select round(avg(dti)\*100, 3) as average\_dti from

bank\_loan\_data where year(issue\_date)=2021 and

month(issue\_date)=12;



3)Month over Month average debt to income

select round(avg(dti)\*100, 3) as average\_dti from

bank\_loan\_data where year(issue\_date)=2021 and

month(issue\_date)=11;



***GOOD LOAN RELATED ANALYSIS:***

1)Good Loan Application Percentage

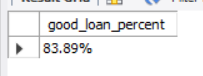
Select concat(round

(count(case when loan\_status= 'Fully Paid' or loan\_status= 'Current' then id end) \*100 /

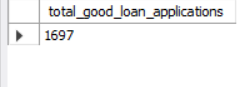
count(\*), 2), '%') as

good\_loan\_percent

from bank\_loan\_data;



2)Good Loan Applications

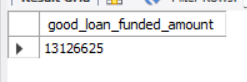


3)Good Loan Funded Amount

select sum(loan\_amount) as good\_loan\_funded\_amount

from bank\_loan\_data

where loan\_status='Fully Paid' or loan\_status='Current';

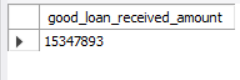


4)Good Loan Total Received Amount

select sum(total\_payment) as good\_loan\_received\_amount

from bank\_loan\_data

where loan\_status='Fully Paid' or loan\_status='Current';



***BAD LOAN RELATED ANALYSIS:***

1)Bad Loan Application Percentage

select

concat(round(

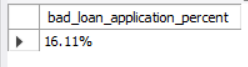
count(case when loan\_status='Charged Off' then id end)\*100 /

count(id), 2),

'%')

as bad\_loan\_application\_percent

from bank\_loan\_data;

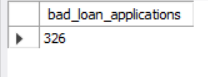


2)Bad Loan Applications

select count(id) as bad\_loan\_applications

from bank\_loan\_data

where loan\_status='Charged Off';

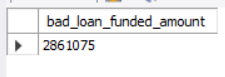


3)Bad Loan Funded Amount

select sum(loan\_amount) as bad\_loan\_funded\_amount

from bank\_loan\_data

where loan\_status='Charged Off';

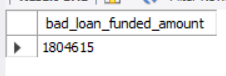


4)Bad Loan Total Received Amount

select sum(total\_payment) as bad\_loan\_funded\_amount

from bank\_loan\_data

where loan\_status='Charged Off';



***GRID VIEW:*** View all the details in grid view based on loan status total applications, total funded amount, total received amount, month to date funded amount,

Month to date received amount, average interest rate, average debt to income ratio.

select loan\_status,

count(id) as total\_applications,

sum(loan\_amount) as total\_funded\_amount,

sum(total\_payment) as total\_received\_amount,

sum(case when year(issue\_date)=2021 and month(issue\_date)=12 then

loan\_amount end) as mtd\_funded\_amount,

sum(case when year(issue\_date)=2021 and month(issue\_date)=12 then

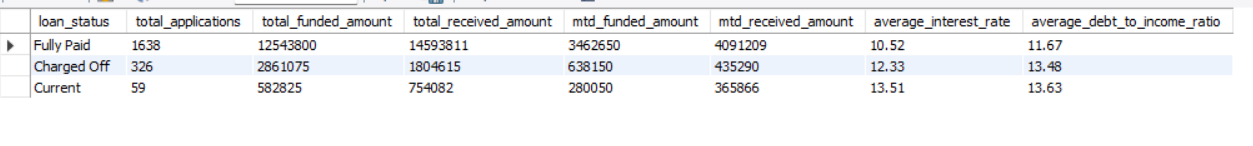
total\_payment end) as mtd\_received\_amount,

round(avg(int\_rate)\*100,2) as average\_interest\_rate,

round(avg(dti)\*100,2) as average\_debt\_to\_income\_ratio

from bank\_loan\_datas

group by loan\_status;



***FOR CHART ANALYSIS:***

Calculate total applications, total funded amount, total received amount for the following:

1. Monthly trends by issue date

select

month(issue\_date) as month\_number,

monthname(issue\_date) as month\_name,

count(id) as total\_applications,

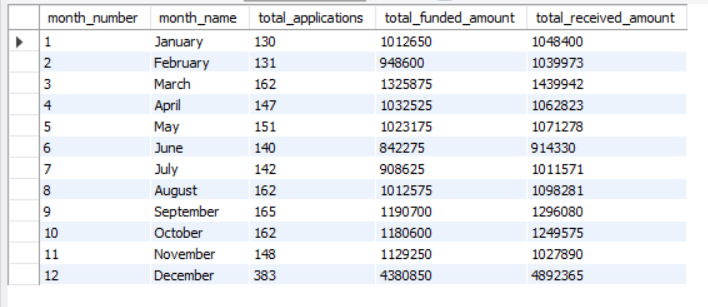
sum(loan\_amount) as total\_funded\_amount,

sum(total\_payment) as total\_received\_amount

from bank\_loan\_data

group by month(issue\_date), monthname(issue\_date)

order by month(issue\_date) ;



2)Regional analysis by state

select

address\_state as state,

count(id) as total\_applications,

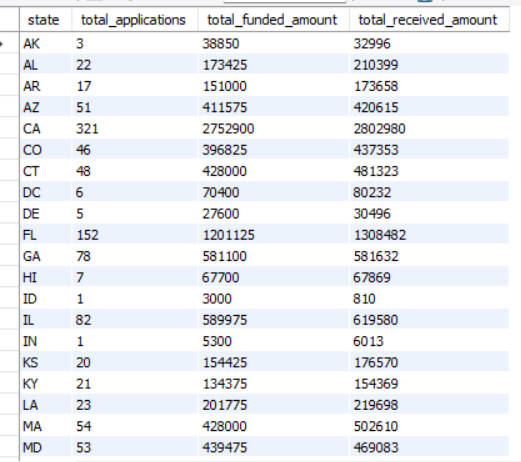
sum(loan\_amount) as total\_funded\_amount,

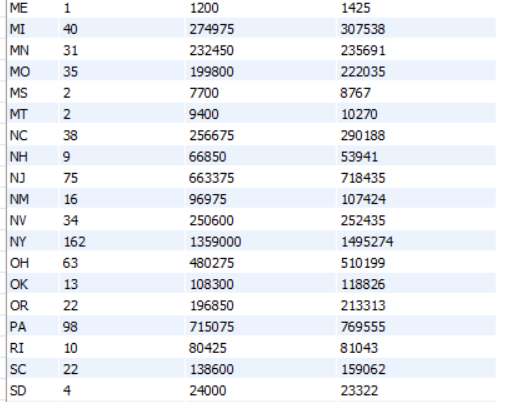
sum(total\_payment) as total\_received\_amount

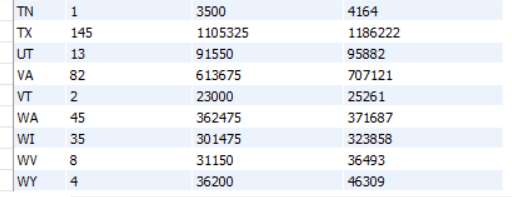
from bank\_loan\_data

group by address\_state

order by address\_state ;







3)Total term analysis

select

term as loan\_term,

count(id) as total\_applications,

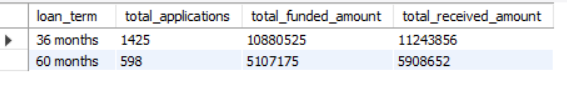
sum(loan\_amount) as total\_funded\_amount,

sum(total\_payment) as total\_received\_amount

from bank\_loan\_data

group by term

order by term;



4)Emp length analysis

select

emp\_length as employee\_length,

count(id) as total\_applications,

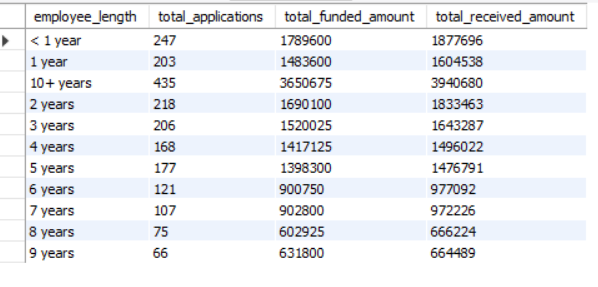
sum(loan\_amount) as total\_funded\_amount,

sum(total\_payment) as total\_received\_amount

from bank\_loan\_data

group by emp\_length

order by emp\_length;



5)Loan purpose

select

purpose as loan\_purpose,

count(id) as total\_applications,

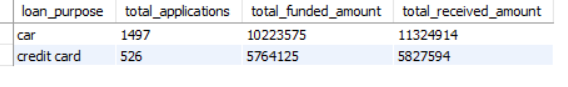
sum(loan\_amount) as total\_funded\_amount,

sum(total\_payment) as total\_received\_amount

from bank\_loan\_data

group by purpose

order by purpose;



6)Home ownership analysis

select

home\_ownership,

count(id) as total\_applications,

sum(loan\_amount) as total\_funded\_amount,

sum(total\_payment) as total\_received\_amount

from bank\_loan\_data

group by home\_ownership

order by home\_ownership;

