**BANK LOAN ANALYSIS**

1. **BANK LOAN ANALYSIS | SUMMARY**

**Total no of Loan Applications**

select COUNT(id) as Total\_Applications from loan\_data



**Total no of Loan Applications latest month (MTD)**

select COUNT(id) as MTD\_Total\_Applications from loan\_data

where MONTH(issue\_date) = 12

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**Total no of Loan Applications previous month (PMTD)**

select COUNT(id) as PMTD\_Total\_Applications from loan\_data

where MONTH(issue\_date) = 11



--2. Total Funded Amount:

select SUM(loan\_amount) as Total\_Funded\_Amount from loan\_data



select SUM(loan\_amount) as MTD\_Total\_Funded\_Amount from loan\_data

where MONTH(issue\_date) = 12



select SUM(loan\_amount) as PMTD\_Total\_Funded\_Amount from loan\_data

where MONTH(issue\_date) = 11



--3. Total Amount Received:

select SUM(total\_payment) as Total\_Received\_Amount from loan\_data



select SUM(total\_payment) as MTD\_Total\_Received\_Amount from loan\_data

where MONTH(issue\_date) = 12



select SUM(total\_payment) as PMTD\_Total\_Received\_Amount from loan\_data

where MONTH(issue\_date) = 11



--4. Average Interest Rate:

select AVG(int\_rate)\*100 as Average\_Interest\_Rate from loan\_data



select AVG(int\_rate)\*100 as MTD\_Average\_Interest\_Rate from loan\_data

where MONTH(issue\_date) = 12



select AVG(int\_rate)\*100 as PMTD\_Average\_Interest\_Rate from loan\_data

where MONTH(issue\_date) = 11



--5. Average Debt-to-Income Ratio (DTI):

select AVG(dti)\*100 as Average\_DTI from loan\_data



select AVG(dti)\*100 as MTD\_Average\_DTI from loan\_data

where MONTH(issue\_date) = 12



select AVG(dti)\*100 as PMTD\_Average\_DTI from loan\_data

where MONTH(issue\_date) = 11



-- Good Loan

select COUNT(id) AS Total\_good\_loan\_Applications

from loan\_data

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



select (COUNT(case when loan\_status = 'Fully Paid' or loan\_status = 'Current' then id end)\*100)/COUNT(id) as Good\_loan\_Percent

from loan\_data



select SUM(loan\_amount) as Total\_good\_loan\_funded\_amount from loan\_data

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



select SUM(total\_payment) as Total\_amount\_received\_from\_good\_loan from loan\_data

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



-- Bad Loan

select COUNT(id) as Total\_bad\_loan\_Applications

from loan\_data

where loan\_status = 'Charged Off'



select (COUNT(case when loan\_status = 'Charged Off' then id end)\*100)/COUNT(id) as Bad\_loan\_Percent

from loan\_data



select SUM(loan\_amount) as Total\_good\_loan\_funded\_amount from loan\_data

where loan\_status = 'Charged Off'



select SUM(total\_payment) as Total\_amount\_received\_from\_good\_loan from loan\_data

where loan\_status = 'Charged Off'



-- Summary tables

select

loan\_status,

COUNT(id) as No\_of\_Applications,

SUM(loan\_amount) as Total\_amount\_Funded,

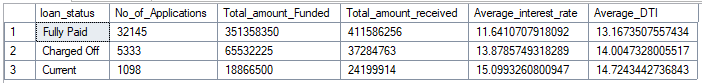
SUM(total\_payment) as Total\_amount\_received,

AVG(int\_rate)\*100 as Average\_interest\_rate,

AVG(dti)\*100 as Average\_DTI

from loan\_data

GROUP BY loan\_status



--MTD

SELECT

loan\_status as Loan\_Status\_MTD,

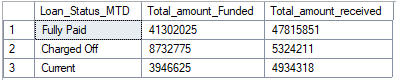
SUM(loan\_amount) as Total\_amount\_Funded,

SUM(total\_payment) as Total\_amount\_received

FROM loan\_data

where MONTH(issue\_date) = 12

GROUP BY loan\_status



--PMTD

SELECT

loan\_status as Loan\_Status\_PMTD,

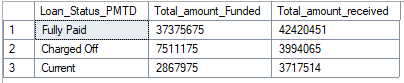
SUM(loan\_amount) as Total\_amount\_Funded,

SUM(total\_payment) as Total\_amount\_received

FROM loan\_data

where MONTH(issue\_date) = 11

GROUP BY loan\_status



1. **BANK LOAN ANALYSIS | OVERVIEW**

--Monthly Trend

select

MONTH(issue\_date) as Month\_Number,

DATENAME(month,issue\_date) as Month\_Name,

COUNT(id) as Total\_Application,

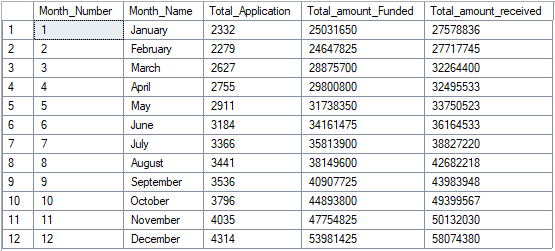
SUM(loan\_amount) as Total\_amount\_Funded,

SUM(total\_payment) as Total\_amount\_received

from loan\_data

group by MONTH(issue\_date), DATENAME(month,issue\_date)

order by MONTH(issue\_date)



-- Regional Analysis

select

top(20)

address\_state as State\_Name,

COUNT(id) as Total\_Application,

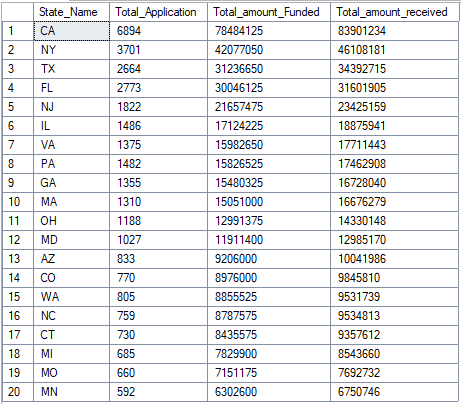
SUM(loan\_amount) as Total\_amount\_Funded,

SUM(total\_payment) as Total\_amount\_received

from loan\_data

group by address\_state

order by SUM(loan\_amount) desc



-- Term

select

term as Term\_Frequency,

COUNT(id) as Total\_Application,

SUM(loan\_amount) as Total\_amount\_Funded,

SUM(total\_payment) as Total\_amount\_received

from loan\_data

group by term



-- Employeement Status

select

emp\_length as Employeement\_Status,

COUNT(id) as Total\_Application,

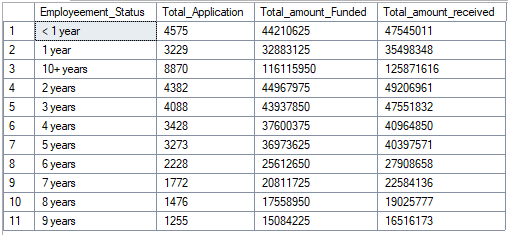
SUM(loan\_amount) as Total\_amount\_Funded,

SUM(total\_payment) as Total\_amount\_received

from loan\_data

group by emp\_length

order by emp\_length



-- Loan Purpose Breakdown

select

purpose as Loan\_Purpose,

COUNT(id) as Total\_Application,

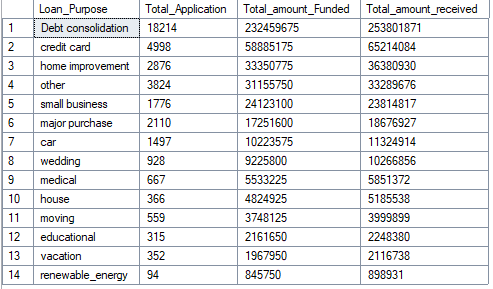
SUM(loan\_amount) as Total\_amount\_Funded,

SUM(total\_payment) as Total\_amount\_received

from loan\_data

group by purpose

order by SUM(loan\_amount) desc



-- Home Ownership

select

home\_ownership as Home\_Ownership,

COUNT(id) as Total\_Application,

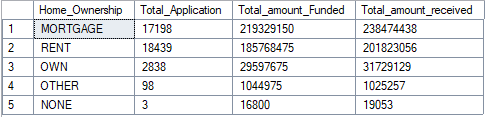
SUM(loan\_amount) as Total\_amount\_Funded,

SUM(total\_payment) as Total\_amount\_received

from loan\_data

group by home\_ownership

order by SUM(loan\_amount) desc



-- Filtering

select

home\_ownership as Home\_Ownership,

grade as Grade,

COUNT(id) as Total\_Application,

SUM(loan\_amount) as Total\_amount\_Funded,

SUM(total\_payment) as Total\_amount\_received

from loan\_data

where

grade in ('A','B')

and

address\_state = 'CA'

group by home\_ownership, grade

order by grade, SUM(loan\_amount) desc

