**BANK LOAN REPORT (SQL Query Documentations)**

**DASHBOARD 1 : SUMMARY**

**KPI’s**

1. Total Loan Applications

**select count(ID) as Total\_Applications from bank\_loan\_db;**



1. MTD Loan Applications (Month to Date)

**SELECT COUNT(ID) AS Total\_Applications FROM bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 12 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



1. Previous Month Loan Applications (Month to Date)

**SELECT COUNT(ID) AS PMTP\_Total\_Applications FROM bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 11 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



1. Total Funded Amount

**select sum(loan\_amount) as Total\_Funded\_Amount from bank\_loan\_db;**



1. Month to Date Total Funded Amount

**select sum(loan\_amount) as MTD\_Total\_Funded\_Amount from bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 12 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



1. Previous Month to Date Total Funded Amount

**select sum(loan\_amount) as PMTD\_Total\_Funded\_Amount from bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 11 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



1. Total Payment Received

**select sum(TOTAL\_PAYMENT) as Toatl\_Amount\_Received from bank\_loan\_db;**



1. Total Payment Received MTD

**select sum(TOTAL\_PAYMENT) as Toatl\_Amount\_Received from bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 11 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



1. Total Payment Received PMTD

**select sum(TOTAL\_PAYMENT) as PMTD\_Toatl\_Amount\_Received from bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 11 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



1. Average Interest Rate

**select round(avg(int\_rate) \*100,2) as AVG\_INT\_RATE from bank\_loan\_db;**



1. Average Interest Rate MTD

**select round(avg(int\_rate) \*100,2) as AVG\_INT\_RATE from bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 12 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



1. Average Interest Rate PMTD

**select round(avg(int\_rate) \*100,2) as AVG\_INT\_RATE from bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 11 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



1. Average Debt-to-income Ratio (DTI)

**select round(avg(dti)\*100,2 ) as AVG\_DTI\_RATIO from bank\_loan\_db;**



1. Average Debt-to-income Ratio (DTI) MTD

**select round(avg(dti)\*100,2 ) as MTD\_AVG\_DTI\_RATIO from bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 12 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



1. Average Debt-to-income Ratio (DTI) PMTD

**select round(avg(dti)\*100,2 ) as PMTD\_AVG\_DTI\_RATIO from bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 11 AND EXTRACT(YEAR FROM issue\_date) = 2021;**



**Good Loan v Bad Loan KPI’s**

**Good Loan**

1. Good Loan Application Percentage

**SELECT**

**ROUND(**

**(SUM(CASE WHEN loan\_status IN ('Fully Paid', 'Current') THEN 1 ELSE 0 END) \* 100.0)**

**/ COUNT(id),**

**2**

**) AS Good\_Loan\_Percentage**

**FROM bank\_loan\_db;**



1. Good loan Application

**select count(id) as Good\_Loan\_Application from bank\_loan\_db where loan\_status in ('Fully Paid','Current');**



1. Good Loan Funded Amount

**select sum(loan\_amount) as Good\_Loan\_Funded\_Amount from bank\_loan\_db where loan\_status in ('Fully Paid','Current');**



1. Good Loan Total Received amount

**select sum(total\_payment) as Good\_Loan\_Received\_Amount from bank\_loan\_db where loan\_status in ('Fully Paid','Current');**



**Bad\_Loan**

1. Good Loan Application Percentage

**SELECT**

**ROUND(**

**(SUM(CASE WHEN loan\_status ='Charged Off' THEN 1 ELSE 0 END) \* 100.0)**

**/ COUNT(id),**

**2**

**) AS Bad\_Loan\_Percentage**

**FROM bank\_loan\_db;**



1. Bad loan Application

**select count(id) as Bad\_Loan\_Application from bank\_loan\_db where loan\_status = 'Charged Off';**



1. Bad Loan Funded Amount

**select sum(loan\_amount) as Bad\_Loan\_Funded\_Amount from bank\_loan\_db where loan\_status = 'Charged Off';**



1. Good Loan Total Received amount

**select sum(total\_payment) as Bad\_Loan\_Received\_Amount from bank\_loan\_db where loan\_status = 'Charged Off';**



**Loan Status**

**select**

**loan\_status,**

**count(id) as Loan\_Application,**

**sum(total\_payment) as Total\_Amount\_Received,**

**sum(Loan\_Amount) as Total\_Funded\_Amount,**

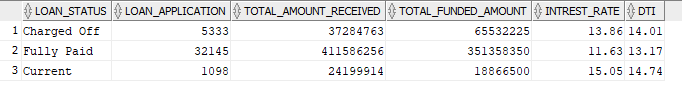
**round(avg(int\_rate \*100),2) as Intrest\_Rate,**

**round(avg(dti \* 100),2) as DTI**

**from**

**bank\_loan\_db**

**group by loan\_status;**



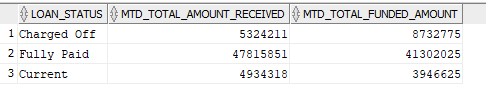
**Current Month**

**select loan\_status,**

**sum(total\_payment) as MTD\_Total\_Amount\_Received,**

**sum(loan\_amount) as MTD\_Total\_Funded\_Amount**

**from bank\_loan\_db WHERE EXTRACT(MONTH FROM issue\_date) = 12 group by loan\_status;**



**DASHBOARD 2 : OVERVIEW**

1. Monthly Trend by Issue Date

**SELECT**

**EXTRACT(MONTH FROM issue\_date) AS Month\_Number,**

**TO\_CHAR(issue\_date, 'Month') AS Month\_Name,**

**COUNT(id) AS Total\_Loan\_Application,**

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

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

**FROM bank\_loan\_db**

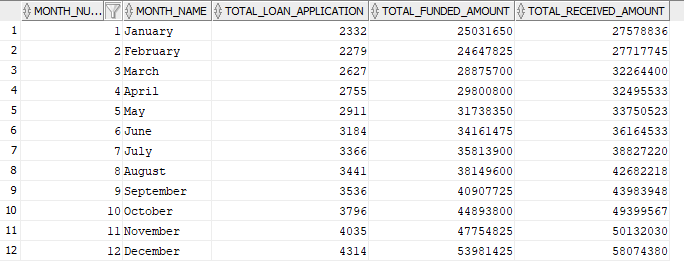
**GROUP BY**

**EXTRACT(MONTH FROM issue\_date),**

**TO\_CHAR(issue\_date, 'Month')**

**ORDER BY**

**EXTRACT(MONTH FROM issue\_date);**



1. Regional Analysis by State

**SELECT**

**address\_state,**

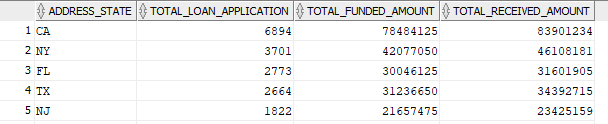
**COUNT(id) AS Total\_Loan\_Application,**

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

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

**FROM bank\_loan\_db**

**GROUP BY address\_state order by count(id) desc;**



1. Loan Term Analysis

**SELECT**

**term,**

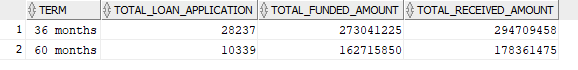
**COUNT(id) AS Total\_Loan\_Application,**

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

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

**FROM bank\_loan\_db**

**GROUP BY term order by term;**



1. Employee Length Analysis

**SELECT**

**emp\_length,**

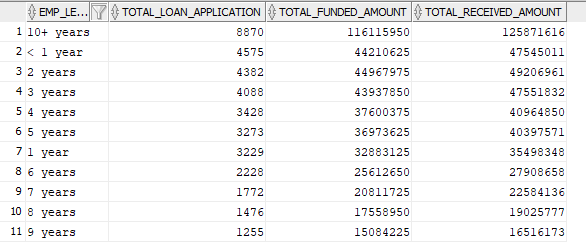
**COUNT(id) AS Total\_Loan\_Application,**

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

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

**FROM bank\_loan\_db**

**GROUP BY emp\_length order by COUNT(id) desc;**



1. Loan Purpose Breakdown

**SELECT**

**purpose,**

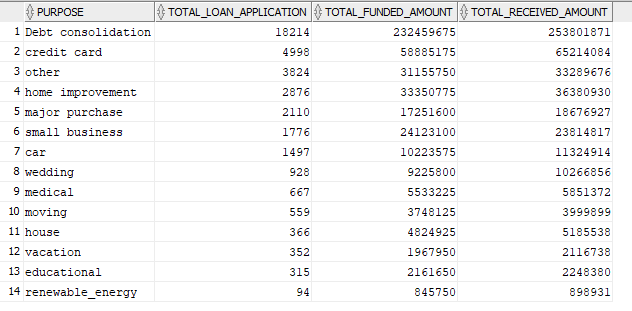
**COUNT(id) AS Total\_Loan\_Application,**

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

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

**FROM bank\_loan\_db**

**GROUP BY purpose order by COUNT(id) desc;**



1. Home Ownership analysis

**SELECT**

**home\_ownership,**

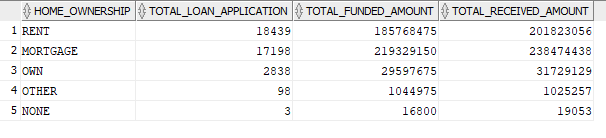
**COUNT(id) AS Total\_Loan\_Application,**

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

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

**FROM bank\_loan\_db**

**GROUP BY home\_ownership order by COUNT(id) desc;**



**DASHBOARD 3 : DETAILED**

**Gird View**

**Select \*from bank\_loan\_db;**