BANK LOAN REPORT CROSS CHECKING USING SQL QUERIES

KPIs:

1.Total loan Applications:

select count(id) as total_loan_applications from financial_loan

total_loan_applications
38576

2.MTD (Month to date) Loan Applications:

select count(id) as MTD_loan_applications from bank_loan where month(issue_date)=12

MTD_loan_applications
4314

3. PMTD(Previous Month to date) loan Applications:

select count(id) as MTD_loan_applications from bank_loan where month(issue_date)=11 and year(issue_date)=2021

MTD_loan_applications
4035

4.Total Funded Amount:

select sum(loan_amount) as total_laon_amount from bank_loan

total_laon_amount
435757075

5.MTD Funded Amount:

select sum(loan_amount) as total_laon_amount from bank_loan where month(issue_date)=12

total_laon_amount
53981425

6. PMTD Funded Amount:

select sum(loan_amount) as total_laon_amount from bank_loan where month(issue_date)=11

total_laon_amount
47754825

7. Total Payment Amount:

select sum(total_payment) as total_payment_amount from bank_loan

total_payment_amount
473070933

8. MTD Payment Amount:

select sum(total_payment) as MTD_total_payment_amount from bank_loan where month(issue_date)=12

MTD_total_payment_amount
58074380

9. PMTD Payment Amount:

select sum(total_payment) as PMTD_total_payment_amount from bank_loan where month(issue_date)=11

PMTD_total_payment_amount
50132030

10. Avg Interest Rate:

select AVG(int_rate)*100 as avg_interest_rate from bank_loan

avg_interest_rate
12.048831397760457

10. Avg MTD Interest Rate:

select round(AVG(int_rate)*100,2) as MTD_avg_interest_rate from bank_loan WHERE MONTH(issue_date) = 12

MTD_avg_interest_rate
12.36

11. Avg PMTD Interest Rate:

select AVG(int_rate)*100 as PMTD_avg_interest_rate from bank_loan WHERE MONTH(issue_date) = 11

PMTD_avg_interest_rate
11.94

12. Avg DTI:

SELECT AVG(dti)*100 AS Avg_DTI FROM bank_loan

Avg_DTI
13.327433119037776

13. Avg MTD DTI:

SELECT round(AVG(dti)*100 ,2)AS MTD_Avg_DTI FROM bank_loan WHERE MONTH(issue_date) = 12

MTD_Avg_DTI
13.67

14.Avg PMTD DTI:

SELECT round(AVG(dti)*100 ,2)AS PMTD_Avg_DTI FROM bank_loan WHERE MONTH(issue_date) = 11

PMTD_Avg_DTI
13.3

GOOD LOAN KPIs:

1.Good Loan Percentage:

SELECT (COUNT(CASE WHEN loan_status = 'Fully Paid' OR loan_status = 'Current' THEN id END) * 100.0) /

COUNT(id) AS Good_Loan_Percentage FROM bank_loan

Good_Loan_Percentage
86.17534

2.Good Loan Applications:

SELECT COUNT(id) AS Good_Loan_Applications FROM bank_loan WHERE loan_status = 'Fully Paid' OR loan_status = 'Current'

Good_Loan_Applications
33243

3.Good Loan Funded Amount:

SELECT SUM(loan_amount) AS Good_Loan_Funded_amount FROM bank_loan WHERE loan_status = 'Fully Paid' OR loan_status = 'Current'

Good_Loan_Funded_amount
370224850

4.Good Loan Payment Received:
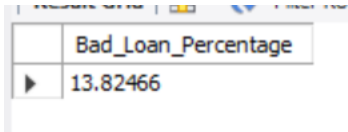
SELECT SUM(total_payment) AS Good_Loan_payment_received FROM bank_loan WHERE loan_status = 'Fully Paid' OR loan_status = 'Current'

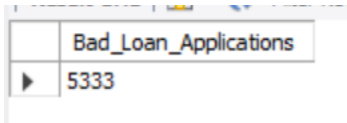| Good_Loan_payment_received |
| --- |
| 435786170 |

BAD LOAN KPIs:

1.Bad Loan Percentage:

SELECT (SELECT COUNT(id) FROM bank_loan WHERE loan_status = 'Charged Off') * 100.0 / (SELECT COUNT(id) FROM bank_loan) AS Bad_Loan_Percentage;

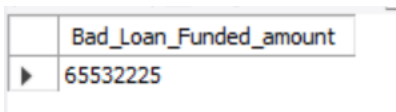| Bad_Loan_Percentage |
|---|
| 13.82466 |

2.Good Loan Applications:

SELECT COUNT(id) AS Bad_Loan_Applications FROM bank_loan WHERE loan_status = 'Charged Off'

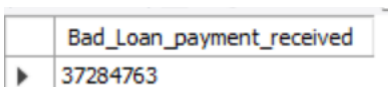| Bad_Loan_Applications |
|---|
| 5333 |

3.Bad Loan Funded Amount:

SELECT SUM(loan_amount) AS Bad_Loan_Funded_amount FROM bank_loan WHERE loan_status = 'Charged Off'

Bad_Loan_Funded_amount
65532225

4.Bad Loan Payment Received:

SELECT SUM(total_payment) AS Bad_Loan_payment_received FROM bank_loan WHERE loan_status = 'Charged Off'

Bad_Loan_payment_received
37284763

LOAN STATUS:

SELECT loan_status,

COUNT(id) AS LoanCount,

SUM(total_payment) AS Total_Amount_Received,

SUM(loan_amount) AS Total_Funded_Amount,

ROUND(AVG(int_rate * 100),2) AS Interest_Rate,

ROUND(AVG(dti * 100),2) AS DTI FROM

bank_loan

GROUP BY

loan_status

loan_status	LoanCount	Total_Amount_Received	Total_Funded_Amount	Interest_Rate	DTI
Charged Off	5333	37284763	65532225	13.88	14
Fully Paid	32145	411586256	351358350	11.64	13.17
Current	1098	24199914	18866500	15.1	14.72

PMTD loan Status:

SELECT

       loan_status,

       SUM(total_payment) AS MTD_Total_Amount_Received,

       SUM(loan_amount) AS MTD_Total_Funded_Amount

FROM bank_loan

WHERE MONTH(issue_date) = 11

GROUP BY loan_status

loan_status	MTD_Total_Amount_Received	MTD_Total_Funded_Amount
Fully Paid	42420451	37375675
Charged Off	3994065	7511175
Current	3717514	2867975

LOAN STATUS FOR EVERY MONTH:

SELECT

       MONTH(issue_date) AS Month_Number,

       MONTHNAME(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

GROUP BY MONTH(issue_date), MONTHNAME(issue_date)

ORDER BY MONTH(issue_date)

Month_Number	Month_name	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
1	January	2332	25031650	27578836
2	February	2279	24647825	27717745
3	March	2627	28875700	32264400
4	April	2755	29800800	32495533
5	May	2911	31738350	33750523
6	June	3184	34161475	36164533
7	July	3366	35813900	38827220
8	August	3441	38149600	42682218
9	September	3536	40907725	43983948
10	October	3796	44893800	49399567
11	November	4035	47754825	50132030
12	December	4314	53981425	58074380

LOAN STATUS STATEWISE:

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

GROUP BY address_state

ORDER BY address_state

State	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received	
AK	78	1031800	1108570	
AL	432	4949225	5492272	
AR	236	2529700	2777875	
AZ	833	9206000	10041986	
CA	6894	78484125	83901234	
CO	770	8976000	9845810	
CT	730	8435575	9357612	9845810
DC	214	2652350	2921854	
DE	110	1138100	1269136	
FL	2773	30046125	31601905	
GA	1355	15480325	16728040	
HT	170	1850525	2080184	

Result 57 ×

LOAN STATUS BASED ON TERM:

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

GROUP BY term

ORDER BY term

Term	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
36 months	28237	273041225	294709458
60 months	10339	162715850	178361475

LOAN STATUS BASED ON EXPERIENCE:

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

GROUP BY emp_length

ORDER BY emp_length

Employee_Length	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
< 1 year	4575	44210625	47545011
1 year	3229	32883125	35498348
10+ years	8870	116115950	125871616
2 years	4382	44967975	49206961
3 years	4088	43937850	47551832
4 years	3428	37600375	40964850
5 years	3273	36973625	40397571
6 years	2228	25612650	27908658
7 years	1772	20811725	22584136
8 years	1476	17558950	19025777
9 years	1255	15084225	16516173

LOAN STATUS BASED ON LOAN REASON:

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

GROUP BY purpose

ORDER BY purpose

PURPOSE	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
car	1497	10223575	11324914
credit card	4998	58885175	65214084
Debt consolidation	18214	232459675	253801871
educational	315	2161650	2248380
home improvement	2876	33350775	36380930
house	366	4824925	5185538
major purchase	2110	17251600	18676927
medical	667	5533225	5851372
moving	559	3748125	3999899
other	3824	31155750	33289676
renewable_energy	94	845750	898931
small business	1776	24123100	23814817

LOAN STATUS BASED ON 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

GROUP BY home_ownership

ORDER BY home_ownership

Home_Ownership	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
MORTGAGE	17198	219329150	238474438
NONE	3	16800	19053
OTHER	98	1044975	1025257
OWN	2838	29597675	31729129
RENT	18439	185768475	201823056