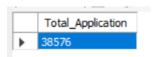# MySQL

BANK LOAN REPORT QUERY DOCUMENT

A. BANK LOAN REPORT | SUMMARY

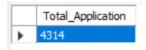### KPI's:

> Total Loan Applications

SELECT COUNT(id) AS Total_Applications FROM bank_loan_data
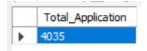
Total_Application
38576

> MTD Loan Applications

SELECT COUNT(id) AS Total_Applications FROM bank_loan_data
WHERE MONTH(issue_date) = 12

Total_Application
4314

> PMTD Loan Applications

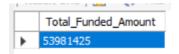SELECT COUNT(id) AS Total_Applications FROM bank_loan_data
WHERE MONTH(issue_date) = 11

Total_Application
4035

> Total Funded Amount

SELECT SUM(loan_amount) AS Total_Funded_Amount FROM bank_loan_data

Total_Funded_Amount
435757075

> MTD Total Funded Amount

SELECT SUM(loan_amount) AS Total_Funded_Amount FROM bank_loan_data
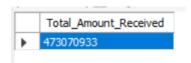WHERE MONTH(issue_date) = 12

Total_Funded_Amount
53981425

➢ **PMTD Total Funded Amount**

SELECT SUM(loan_amount) AS Total_Funded_Amount FROM bank_loan_data
WHERE MONTH(issue_date) = 11

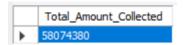| Total_Funded_Amount |
| --- |
| 47754825 |

➢ **Total Amount Received**

SELECT SUM(total_payment) AS Total_Amount_Collected FROM bank_loan_data

Total_Amount_Received
473070933

➢ **MTD Total Amount Received**

SELECT SUM(total_payment) AS Total_Amount_Collected FROM bank_loan_data
WHERE MONTH(issue_date) = 12

Total_Amount_Collected
58074380

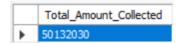➢ **PMTD Total Amount Received**

SELECT SUM(total_payment) AS Total_Amount_Collected FROM bank_loan_data
WHERE MONTH(issue_date) = 11

Total_Amount_Collected
50132030

➢ **Average Interest Rate**

SELECT AVG(int_rate)*100 AS Avg_Int_Rate FROM bank_loan_data

Avg_Int_Rate
12.048831397760178

➢ **MTD Average Interest**

SELECT AVG(int_rate)*100 AS MTD_Avg_Int_Rate FROM bank_loan_data
WHERE MONTH(issue_date) = 12
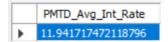
MTD_Avg_Int_Rate
12.356040797403738

➢ PMTD Average Interest

SELECT AVG(int_rate)*100 AS PMTD_Avg_Int_Rate FROM bank_loan_data
WHERE MONTH(issue_date) = 11

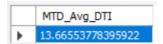| PMTD_Avg_Int_Rate |
|---|
| 11.941717472118796 |

➢ Avg DTI

SELECT AVG(dti)*100 AS Avg_DTI FROM bank_loan_data

Avg_DTI
13.32743311903776

➢ MTD Avg DTI

SELECT AVG(dti)*100 AS MTD_Avg_DTI FROM bank_loan_data
WHERE MONTH(issue_date) = 12

MTD_Avg_DTI
13.66553778395922

➢ PMTD Avg DTI

SELECT AVG(dti)*100 AS PMTD_Avg_DTI FROM bank_loan_data
WHERE MONTH(issue_date) = 11

PMTD_Avg_DTI
13.302733581164853

GOOD LOAN ISSUED

➢ 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_data

Good_Loan_Percentage
86.17534

➢ Good Loan Applications

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

Good_Loan_Applications
33243

➢ 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'

Good_Loan_Funded_Amount
370224850

➢ Good Loan Amount Received

SELECT SUM(total_payment) AS Good_Loan_amount_received FROM bank_loan_data
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current'

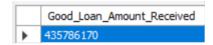| Good_Loan_Amount_Received |
| --- |
| 435786170 |

BAD LOAN ISSUED

➢ Bad Loan Percentage

SELECT
  (COUNT(CASE WHEN loan_status = 'Charged Off' THEN id END) * 100.0) /
      COUNT(id) AS Bad_Loan_Percentage
FROM bank_loan_data

Bad_Loan_Percentage
13.82466

➢ Bad Loan Applications

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

Bad_Loan_Applications
5333

➢ Bad Loan Funded Amount

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

Bad_Loan_Funded_amount
65532225

➢ Bad Loan Amount Received

SELECT SUM(total_payment) AS Bad_Loan_amount_received FROM bank_loan_data
WHERE loan_status = 'Charged Off'

Bad_Loan_Funded_amount
65532225

LOAN STATUS

SELECT
    loan_status,
    COUNT(id) AS LoanCount,
    SUM(total_payment) AS Total_Amount_Received,
    SUM(loan_amount) AS Total_Funded_Amount,
    AVG(int_rate * 100) AS Interest_Rate,
    AVG(dti * 100) AS DTI
FROM
    bank_loan_data
GROUP BY
    loan_status

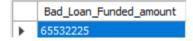|	loan_status	Total_loan_Application	Total_Received_Amount	Total_Funded_Amount	Interest_Rate	DTI
▶	Charged Off	5333	37284763	65532225	13.878574910931935	14.004732795799802
	Fully Paid	32145	411586256	351358350	11.641070773059623	13.167350754394155
	Current	1098	24199914	18866500	15.09932604735884	14.724344262295075

➤ **MTD TOTAL AMOUNT RECEIVED AND MTD TOTAL FUNDED AMOUNT**

SELECT
        loan_status,
        SUM(total_payment) AS MTD_Total_Amount_Received,
        SUM(loan_amount) AS MTD_Total_Funded_Amount
FROM bank_loan_data
WHERE MONTH(issue_date) = 12
GROUP BY loan_status

	loan_status	MTD_Total_Amount_Received	MTD_Total_Funded_Amount
▶	Fully Paid	47815851	41302025
	Charged Off	5324211	8732775
	Current	4934318	3946625

B. BANK LOAN REPORT | OVERVIEW

MONTH

SELECT
        MONTH(issue_date) AS Month_Munber,
        DATENAME(MONTH, 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_data
GROUP BY MONTH(issue_date), DATENAME(MONTH, issue_date)
ORDER BY MONTH(issue_date)

Month_Munber	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

STATE

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_data

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
DC	214	2652350	2921854
DE	110	1138100	1269136
FL	2773	30046125	31601905
GA	1355	15480325	16728040
HI	170	1850525	2080184
IA	5	56450	64482
ID	6	59750	65329
IL	1486	17124225	18875941
IN	9	86225	85521
KS	260	2872325	3247394

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_data

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

EMPLOYEE LENGTH

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_data

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

PURPOSE

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_data

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
vacation	352	1967950	2116738
wedding	928	9225800	10266856

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_data

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