

# BANK LOAN REPORT QUERY DOCUMENT

## A. BANK LOAN REPORT | SUMMARY

### KPIs:

#### Total Loan Applications

```
SELECT COUNT(id) AS Total_Applications FROM bank_loan_db.bank_loan;
```

Total_Applications
38576

#### MTD Loan Applications

```
SELECT COUNT(id) AS MTD_Total_Loan_Applications FROM bank_loan  
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021;
```

MTD_Total_Loan_Applications
4314

#### Previous MTD (PMTD) Loan Applications

```
SELECT COUNT(id) AS PMTD_Total_Loan_Application FROM bank_loan  
WHERE MONTH(issue_date) = 11
```

PMTD_Total_Loan_Application
4035

#### Total Funded Amount

```
SELECT SUM(loan_amount) AS Total_Funded_Amount FROM bank_loan;
```

Total_Funded_Amount
435757075

### MTD Total Funded Amount

```
SELECT SUM(loan_amount) AS MTD_Total_Funded_Amount FROM bank_loan  
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021;
```

MTD_Total_Funded_Amount
53981425

### PMTD Funded Amount

```
SELECT SUM(loan_amount) AS PMTD_Total_Funded_Amount FROM bank_loan  
WHERE MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021;
```

PMTD_Total_Funded_Amount
47754825

### Total Amount Received

```
SELECT SUM(total_payment) AS Total_Amount_Received  
FROM bank_loan;
```

Total_Amount_Received
473070933

### Total Amount Received Month To Date (MTD)

```
SELECT SUM(total_payment) AS MTD_Total_Amount_Received FROM bank_loan  
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021;
```

MTD_Total_Amount_Received
58074380

### Total Amount Received Month To Date (PMTD)

```
SELECT SUM(total_payment) AS PMTD_Total_Amount_Received FROM bank_loan
WHERE MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021;
```

PMTD_Total_Amount_Received
50132030

#### Average Interest Rate

```
SELECT AVG(int_rate) AS Avg_Int_Rate FROM bank_loan;
```

Avg_Int_Rate
0.12048831397760178

#### MTD Average Interest Rate

```
SELECT AVG(int_rate) AS MTD_Avg_Int_Rate FROM bank_loan
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021;
```

MTD_Avg_Int_Rate
0.12356040797403738

#### PMTD Average Interest Rate

```
SELECT AVG(int_rate) AS PMTD_Avg_Int_Rate FROM bank_loan
WHERE MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021;
```

PMTD_Avg_Int_Rate
0.11941717472118796

#### Average Debt To Income Ratio (DTI)

```
SELECT AVG(dti)*100 AS Avg_DTI FROM bank_loan;
```

Avg_DTI
13.32743311903776

### MTD Average DTI

```
SELECT AVG(dti)*100 AS MTD_Avg_DTI FROM bank_loan
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021;
```

MTD_Avg_DTI
13.66553778395922

### PMTD Average DTI

```
SELECT AVG(dti)*100 AS PMTD_Avg_DTI FROM bank_loan
WHERE MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021;
```

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) /
        COUNT(id) AS Good_Loan_Percentage
FROM bank_loan;
```

Good_Loan_Percentage
86.1753

### 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

### 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

### Good Loan Amount Received

```
SELECT SUM(total_payment) AS Good_Loan_Amount_Received
FROM bank_loan
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current';
```

Good_Loan_Amount_Received
435786170

## BAD LOAN ISSUED

### Bad Loan Percentage

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

Bad_Loan_Percentage
13.8247

### Bad Loan Applications

```
SELECT COUNT(id) AS Bad_Loan_Applications
FROM bank_loan
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
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
WHERE loan_status = 'Charged off';
```

Bad_Loan_Amount_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,
    AVG(int_rate * 100) AS Interest_Rate,
    AVG(dti * 100) 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	13.878574910931917	14.004732795799695
Fully Paid	32145	411586256	351358350	11.641070773058658	13.167350754394164
Current	1098	24199914	18866500	15.0993260473588	14.724344262295068

## MTD 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) = 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_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

### 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
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
KY	320	3504100	3792530
LA	426	4498900	5001160
MA	1310	15051000	16676279
MD	1027	11911400	12985170
ME	3	9200	10808
MI	685	7829900	8543660
MN	592	6302600	6750746
MO	660	7151175	7692732

## 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

## 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  
GROUP BY emp_length;
```

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

## PURPOSE

### 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;

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  
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