

## BANK LOAN REPORT SQL QUERY DOCUMENT

### A. BANK LOAN REPORT | SUMMARY

#### KPI'S:

##### Total Loan Applications

```
SELECT COUNT(id) AS Total_Applications FROM bank_loan_data
```

| Total_Applications |
|--------------------|
| 38576              |

##### MTD Loan Applications

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

| Total_Applications |
|--------------------|
| 4314               |

##### PMTD Loan Applications

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

| Total_Applications |
|--------------------|
| 4035               |

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##### 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            |

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### Total Amount Received

```
SELECT SUM(total_payment) AS Total_Amount_Collected FROM bank_loan_data
```

| Total_Amount_Collected |
|------------------------|
| 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               |

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### Average Interest Rate

```
SELECT AVG(int_rate)*100 AS Avg_Int_Rate FROM bank_loan_data
```

| Avg_Int_Rate     |
|------------------|
| 12.0488314172048 |

### 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 |
|------------------|
| 12.3560408676042 |

### 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 |
|-------------------|
| 11.9417175498261  |

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```
SELECT AVG(dti)*100 AS Avg_DTI FROM bank_loan_data
```

| Avg_DTI          |
|------------------|
| 13.3274331211432 |

#### MTD Avg DTI

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

| MTD_Avg_DTI      |
|------------------|
| 13.6655377880425 |

#### PMTD Avg DTI

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

| PMTD_Avg_DTI     |
|------------------|
| 13.3027335836364 |

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## 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 |
|----------------------|
| 86.175342181667      |

#### 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                 |

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## 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 |
|---------------------|
| 13.824657818332     |

### 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_amount_received |
|--------------------------|
| 37284763                 |

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## 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 | LoanCount | Total_Amount_Received | Total_Funded_Amount | Interest_Rate    | DTI              |
|---|-------------|-----------|-----------------------|---------------------|------------------|------------------|
| 1 | Fully Paid  | 32145     | 411586256             | 351358350           | 11.6410707918092 | 13.1673507557434 |
| 2 | Charged Off | 5333      | 37284763              | 65532225            | 13.8785749318289 | 14.0047328005517 |
| 3 | Current     | 1098      | 24199914              | 18866500            | 15.0993260800947 | 14.7243442736843 |

```

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  | 1            | January    | 2332                    | 25031650            | 27578836              |
| 2  | 2            | February   | 2279                    | 24647825            | 27717745              |
| 3  | 3            | March      | 2627                    | 28875700            | 32264400              |
| 4  | 4            | April      | 2755                    | 29800800            | 32495533              |
| 5  | 5            | May        | 2911                    | 31738350            | 33750523              |
| 6  | 6            | June       | 3184                    | 34161475            | 36164533              |
| 7  | 7            | July       | 3366                    | 35813900            | 38827220              |
| 8  | 8            | August     | 3441                    | 38149600            | 42682218              |
| 9  | 9            | September  | 3536                    | 40907725            | 43983948              |
| 10 | 10           | October    | 3796                    | 44893800            | 49399567              |
| 11 | 11           | November   | 4035                    | 47754825            | 50132030              |
| 12 | 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_data
GROUP BY
    address_state
ORDER BY
    address_state
```

|    | State | Total_Loan_Applications | Total_Funded_Amount | Total_Amount_Received |
|----|-------|-------------------------|---------------------|-----------------------|
| 1  | AK    | 78                      | 1031800             | 1108570               |
| 2  | AL    | 432                     | 4949225             | 5492272               |
| 3  | AR    | 236                     | 2529700             | 2777875               |
| 4  | AZ    | 833                     | 9206000             | 10041986              |
| 5  | CA    | 6894                    | 78484125            | 83901234              |
| 6  | CO    | 770                     | 8976000             | 9845810               |
| 7  | CT    | 730                     | 8435575             | 9357612               |
| 8  | DC    | 214                     | 2652350             | 2921854               |
| 9  | DE    | 110                     | 1138100             | 1269136               |
| 10 | FL    | 2773                    | 30046125            | 31601905              |
| 11 | GA    | 1355                    | 15480325            | 16728040              |
| 12 | HI    | 170                     | 1850525             | 2080184               |
| 13 | IA    | 5                       | 56450               | 64482                 |
| 14 | ID    | 6                       | 59750               | 65329                 |
| 15 | IL    | 1486                    | 17124225            | 18875941              |
| 16 | IN    | 9                       | 86225               | 85521                 |
| 17 | KS    | 260                     | 2872325             | 3247394               |
| 18 | KY    | 320                     | 3504100             | 3792530               |
| 19 | LA    | 426                     | 4498900             | 5001160               |
| 20 | MA    | 1310                    | 15051000            | 16676279              |
| 21 | MD    | 1027                    | 11911400            | 12985170              |
| 22 | ME    | 3                       | 9200                | 10808                 |
| 23 | MI    | 685                     | 7829900             | 8543660               |
| 24 | MN    | 592                     | 6302600             | 6750746               |
| 25 | MO    | 660                     | 7151175             | 7692732               |
| 26 | MS    | 19                      | 139125              | 149342                |
| 27 | MT    | 79                      | 829525              | 892047                |
| 28 | NC    | 759                     | 8787575             | 9534813               |
| 29 | NE    | 5                       | 31700               | 24542                 |
| 30 | NH    | 161                     | 1917900             | 2101386               |
| 31 | NJ    | 1822                    | 21657475            | 23425159              |
| 32 | NM    | 183                     | 1916775             | 2084485               |
| 33 | NV    | 482                     | 5307375             | 5451443               |
| 34 | NY    | 3701                    | 42077050            | 46108181              |
| 35 | OH    | 1188                    | 12991375            | 14330148              |
| 36 | OK    | 293                     | 3365725             | 3712649               |
| 37 | OR    | 436                     | 4720150             | 4966903               |
| 38 | PA    | 1482                    | 15826525            | 17462908              |
| 39 | RI    | 196                     | 1883025             | 2001774               |

## 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 |
|---|-----------|-------------------------|---------------------|-----------------------|
| 1 | 36 months | 28237                   | 273041225           | 294709458             |
| 2 | 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             |

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