

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 |

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_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 |

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 |

Avg DTI

```
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 |

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 |

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 |

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 |