

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_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 |

Note: We have applied multiple Filters on all the dashboards. You can check the results for the filters as well by modifying the query and comparing the results.

For e.g

See the results when we hit the Grade A in the filters for dashboards.

```
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
WHERE grade = 'A'
GROUP BY purpose
ORDER BY purpose
```

