

BANK LOAN REPORT QUERY DOCUMENT

BANK LOAN REPORT | *SUMMARY*

KPI:

-- Total Loan Applications

```
SELECT COUNT(id) AS Total_Loan_Applications
FROM bank_loan.dbo.bank_loan_data
;
```

	Total_Loan_Applications
1	38576

-- Month-to-Date(MTD) Loan Applications

```
SELECT COUNT(id) AS MTD_Loan_Applications
FROM bank_loan.dbo.bank_loan_data
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021
;
```

	MTD_Loan_Applications
1	4314

-- Previous-Month-to-Date(PMTD) Loan Applications

```
SELECT COUNT(id) AS PMTD_Loan_Applications
FROM bank_loan.dbo.bank_loan_data
WHERE MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021
;
```

	PMTD_Loan_Applications
1	4035

-- Total Funded Amount

```
SELECT SUM(loan_amount) AS Total_Funded_Amount
FROM   bank_loan.dbo.bank_loan_data
;
```

	Total_Funded_Amount
1	435757075

-- Month-to-Date(MTD) Total Funded Amount

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

	MTD_Total_Funded_Amount
1	53981425

-- Previous_Month-to-Date(PMTD) Total Funded Amount

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

	PMTD_Total_Funded_Amount
1	47754825

-- Total Amount Received

```
SELECT SUM(total_payment) AS Total_Amount_Received
FROM   bank_loan.dbo.bank_loan_data
;
```

	Total_Amount_Received
1	473070933

-- Month-to-Date(MTD) Total Amount Received

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

	MTD_Total_Amount_Received
1	58074380

-- Previous_Month-to-Date(MTD) Total Amount Received

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

	PMTD_Total_Amount_Received
1	50132030

-- Average Interest Rate

```
SELECT ROUND((AVG(int_rate) * 100),4) AS Avg_Interest_rate
FROM   bank_loan.dbo.bank_loan_data
;
```

	Avg_Interest_rate
1	12.0488

-- MTD Average_Interest_rate

```
SELECT ROUND((AVG(int_rate) * 100),4) AS MTD_Avg_Interest_rate
FROM   bank_loan.dbo.bank_loan_data
WHERE  MONTH(issue_date) = 12 AND YEAR(issue_date)= 2021
;
```

	MTD_Avg_Interest_rate
1	12.356

-- PMTD Average_Interest_rate

```
SELECT ROUND((AVG(int_rate) * 100),4) AS PMTD_Avg_Interest_rate
FROM   bank_loan.dbo.bank_loan_data
WHERE  MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021
;
```

	PMTD_Avg_Interest_rate
1	11.9417

-- Average Debt-to-income (DTI)

```
SELECT ROUND((AVG(dti) * 100),4) AS Avg_DTI
FROM   bank_loan.dbo.bank_loan_data
;
```

	Avg_DTI
1	13.3274

-- MTD Average DTI

```
SELECT ROUND((AVG(dti) * 100),4) AS MTD_Avg_DTI
FROM   bank_loan.dbo.bank_loan_data
WHERE  MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021
;
```

	MTD_Avg_DTI
1	13.6655

-- PMTD Average DTI

```
SELECT ROUND((AVG(dti) * 100),4) AS PMTD_Avg_DTI
FROM   bank_loan.dbo.bank_loan_data
WHERE  MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021
;
```

	PMTD_Avg_DTI
1	13.3027

-- 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.dbo.bank_loan_data  
;
```

Good_Loan_Applications	
1	33243

-- Good Loan Applications

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

-- Good Loan Funded Amount

```
SELECT SUM(loan_amount) AS Good_Loan_Funded_Amount  
FROM   bank_loan.dbo.bank_loan_data  
WHERE  loan_status = 'Fully Paid' OR loan_status = 'Current'  
;
```

Good_Loan_Funded_Amount	
1	370224850

-- Good Loan Total Received Amount

```
SELECT SUM(total_payment) AS Good_Loan_Total_Received_Amount  
FROM   bank_loan.dbo.bank_loan_data  
WHERE  loan_status = 'Fully Paid' OR loan_status = 'Current'  
;
```

Good_Loan_Total_Received_Amount	
1	435786170

-- 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.dbo.bank_loan_data
;
```

	Bad_loan_percentage
1	13.824657818332

-- Bad Loan Applications

```
SELECT COUNT(id) AS Bad_Loan_Applications
FROM   bank_loan.dbo.bank_loan_data
WHERE  loan_status = 'Charged Off'
;
```

	Bad_Loan_Applications
1	5333

-- Bad Loan Funded Amount

```
SELECT SUM(loan_amount) AS Bad_Loan_Funded_Amount
FROM   bank_loan.dbo.bank_loan_data
WHERE  loan_status = 'Charged Off'
;
```

	Bad_Loan_Funded_Amount
1	65532225

-- Bad Loan Recovered

```
SELECT SUM(total_payment) AS Bad_Loan_Amount_Received
FROM   bank_loan.dbo.bank_loan_data
WHERE  loan_status = 'Charged Off'
;
```

	Bad_Loan_Amount_Received
1	37284763

-- Loan Status Grid

```
SELECT loan_status,
       COUNT(id) AS Total_Loan_Applications,
       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.dbo.bank_loan_data
GROUP BY
       loan_status
;
```

	loan_status	Total_Loan_Applications	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.dbo.bank_loan_data
WHERE  MONTH(issue_date) = 12
GROUP BY
       loan_status
;
```

	loan_status	MTD_Total_Amount_Received	MTD_Total_Funded_Amount
1	Fully Paid	47815851	41302025
2	Charged Off	5324211	8732775
3	Current	4934318	3946625

-- Metrics

```
SELECT MONTH(issue_date) AS Month_Number,  
       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_Received_Amount  
FROM   bank_loan.dbo.bank_loan_data  
GROUP BY  
       DATENAME(MONTH, issue_date), MONTH(issue_date)  
ORDER BY  
       MONTH(issue_date)  
;
```

	Month_Number	Month_Name	Total_Loan_Applications	Total_Funded_Amount	Total_Received_Amount
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

-- Regional Analysis

```
SELECT address_state,  
       COUNT(id) AS Total_Loan_Applications,  
       SUM(loan_amount) AS Total_Funded_Amount,  
       SUM(total_payment) AS Total_Received_Amount  
FROM   bank_loan.dbo.bank_loan_data  
GROUP BY  
       address_state  
ORDER BY  
       address_state  
;
```

	address_state	Total_Loan_Applications	Total_Funded_Amount	Total_Received_Amount
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

-- Loan Term Analysis

```
SELECT term,
       COUNT(id) AS Total_Loan_Applications,
       SUM(loan_amount) AS Total_Funded_Amount,
       SUM(total_payment) AS Total_Received_Amount
FROM   bank_loan.dbo.bank_loan_data
GROUP BY
       term
ORDER BY
       term DESC
;
```

	term	Total_Loan_Applications	Total_Funded_Amount	Total_Received_Amount
1	60 months	10339	162715850	178361475
2	36 months	28237	273041225	294709458

-- Employee Length Analysis

```
SELECT emp_length,
       COUNT(id) AS Total_Loan_Applications,
       SUM(loan_amount) AS Total_Funded_Amount,
       SUM(total_payment) AS Total_Received_Amount
FROM   bank_loan.dbo.bank_loan_data
GROUP BY
       emp_length
ORDER BY
       COUNT(id) DESC
;
```

	emp_length	Total_Loan_Applications	Total_Funded_Amount	Total_Received_Amount
1	10+ years	8870	116115950	125871616
2	< 1 year	4575	44210625	47545011
3	2 years	4382	44967975	49206961
4	3 years	4088	43937850	47551832
5	4 years	3428	37600375	40964850
6	5 years	3273	36973625	40397571
7	1 year	3229	32883125	35498348
8	6 years	2228	25612650	27908658
9	7 years	1772	20811725	22584136
10	8 years	1476	17558950	19025777
11	9 years	1255	15084225	16516173

-- Purpose

```
SELECT purpose,
       COUNT(id) AS Total_Loan_Applications,
       SUM(loan_amount) AS Total_Funded_Amount,
       SUM(total_payment) AS Total_Received_Amount
FROM   bank_loan.dbo.bank_loan_data
GROUP BY
       purpose
ORDER BY
       COUNT(id) DESC
;
```

	purpose	Total_Loan_Applications	Total_Funded_Amount	Total_Received_Amount
1	Debt consolidation	18214	232459675	253801871
2	credit card	4998	58885175	65214084
3	other	3824	31155750	33289676
4	home improvement	2876	33350775	36380930
5	major purchase	2110	17251600	18676927
6	small business	1776	24123100	23814817
7	car	1497	10223575	11324914
8	wedding	928	9225800	10266856
9	medical	667	5533225	5851372
10	moving	559	3748125	3999899
11	house	366	4824925	5185538
12	vacation	352	1967950	2116738
13	educational	315	2161650	2248380
14	renewable_energy	94	845750	898931

-- Homeownership

```
SELECT home_ownership,
       COUNT(id) AS Total_Loan_Applications,
       SUM(loan_amount) AS Total_Funded_Amount,
       SUM(total_payment) AS Total_Received_Amount
FROM   bank_loan.dbo.bank_loan_data
GROUP BY
       home_ownership
ORDER BY
       COUNT(id) DESC
;
```

	home_ownership	Total_Loan_Applications	Total_Funded_Amount	Total_Received_Amount
1	RENT	18439	185768475	201823056
2	MORTGAGE	17198	219329150	238474438
3	OWN	2838	29597675	31729129
4	OTHER	98	1044975	1025257
5	NONE	3	16800	19053

--