Data Analyst: Bank Loan Analysis Project

BANK LOAN REPORT QUERY DOCUMENT

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Bank Requirements:

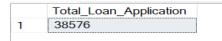
1. Total Loan Applications:

SELECT

COUNT(*) AS Total_Loan_Application

FROM

financial_loan_data



2. MTD Loan Applications:

SELECT

COUNT(*) AS Total_Loan_Application

FROM

financial_loan_data

WHERE

MONTH(issue_date) = 12



3. Total Funded Amount:

SELECT

SUM(loan_amount) AS Total_Loan_Amount

FROM

financial_loan_data



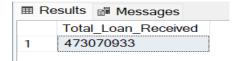
4. Total Amount Received:

SELECT

SUM(total_payment) AS Total_Loan_Received

FROM

financial_loan_data



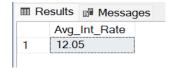
5. Average Interest Rate

SELECT

ROUND(AVG(int_rate),4)*100 AS Avg_Int_Rate

FROM

financial_loan_data



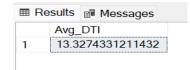
6. Avg Debt To Income Ratio:

SELECT

AVG(dti)*100 AS Avg_DTI

FROM

financial_loan_data



7. Moth To Date Avg Debt To Income Ratio:

SELECT

AVG(dti)*100 AS MTD_Avg_DTI

FROM

financial_loan_data

WHERE

MONTH(issue_date) = 12



GOOD LOAN ISSUED:

1. Good Loan Percentage:

financial_loan_data

SELECT

```
(COUNT(CASE WHEN loan_status = 'Fully Paid' OR loan_status = 'Current' THEN id END)*100.0)
/
COUNT(id) AS Good_Loan_Percentage
FROM
```

2. Good Loan Applications:

SELECT

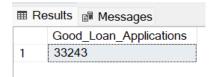
COUNT(id) AS Good_Loan_Applications

FROM

financial_loan_data

WHERE

loan_status = 'Fully Paid' OR loan_status = 'Current'



3. Good Loan Funded Amount:

SELECT

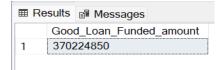
SUM(loan_amount) AS Good_Loan_Funded_amount

FROM

financial_loan_data

WHERE

loan_status = 'Fully Paid' OR loan_status = 'Current'



4. Good Loan Amount Received:

SELECT

SUM(total_payment) AS Good_Loan_amount_received

FROM

financial_loan_data

WHERE

loan_status = 'Fully Paid' OR loan_status = 'Current'



BAD LOAN ISSUED:

1. Bad Loan Percentage:

```
SELECT
```

```
(COUNT(CASE WHEN loan_status = 'Charged Off' THEN id END) * 100.0) /
```

COUNT(id) AS Bad_Loan_Percentage

FROM

financial_loan_data



2. Bad Loan Applications:

SELECT

COUNT(id) AS Bad_Loan_Applications

FROM

financial_loan_data

WHERE

loan_status = 'Charged Off'



3. Bad Loan Funded Amount:

SELECT

SUM(loan_amount) AS Bad_Loan_Funded_amount

FROM

financial_loan_data

WHERE

loan_status = 'Charged Off'



4. Bad Loan Amount Received:

SELECT

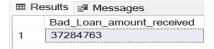
SUM(total_payment) AS Bad_Loan_amount_received

FROM

financial_loan_data

WHERE

loan_status = 'Charged Off'



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

financial_loan_data

GROUP BY

loan_status

■ Results						
	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

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 financial_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 financial_loan_data

GROUP BY address_state

ORDER BY address_state

⊞ Re	■ Results					
	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		

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 financial_loan_data

GROUP BY term

ORDER BY term

⊞ F	Results 📠 Me	ssages		
	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 financial_loan_data

GROUP BY emp_length

ORDER BY emp_length

	Employee_Length	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
1	< 1 year	4575	44210625	47545011
2	1 year	3229	32883125	35498348
3	10+ years	8870	116115950	125871616
4	2 years	4382	44967975	49206961
5	3 years	4088	43937850	47551832
6	4 years	3428	37600375	40964850
7	5 years	3273	36973625	40397571
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 AS PURPOSE,

COUNT(id) AS Total_Loan_Applications,

SUM(loan_amount) AS Total_Funded_Amount,

SUM(total_payment) AS Total_Amount_Received

FROM financial_loan_data

GROUP BY purpose

ORDER BY purpose

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

⊞R	esults 📑 Messages			
	Home_Ownership	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
1	MORTGAGE	17198	219329150	238474438
2	NONE	3	16800	19053
3	OTHER	98	1044975	1025257
4	OWN	2838	29597675	31729129
5	RENT	18439	185768475	201823056