



BANK LOAN QUERIES (POSTGRESQL)

KPI'S:


1. Total Loan Applications: SELECT COUNT(id) AS Total_Applications FROM Financial_loan;

	total_applications 
1	38576

2. MTD Loan Applications: SELECT COUNT(id) AS MTD_Total_Applications FROM Financial_loan WHERE EXTRACT(MONTH FROM issue_date)= AND EXTRACT(YEAR FROM issue_date)= 2021;

	mtd_total_applications 
1	4314

3. PMTD Loan Applications: SELECT COUNT(id) AS PMTD_Total_Applications FROM Financial_loan WHERE EXTRACT(MONTH FROM issue_date)= AND EXTRACT(YEAR FROM issue_date)= 2021;

	pmtd_total_applications 
1	4035

--MOM = (MTD-PMTD)/PMTD

4. Total Funded Amount: SELECT SUM(loan_amount) AS Total_funded_amount FROM Financial_loan;

	total_funded_amount 
1	435757075

5. MTD Total Funded Amount: SELECT SUM(loan_amount) AS MTD_Total_funded_amount FROM Financial_loan WHERE EXTRACT(MONTH FROM issue_date)=12 AND EXTRACT(YEAR FROM issue_date)=2021;

	pmtd_total_funded_amount 
1	53981425

6. PMTD Total Funded Amount: SELECT SUM(loan_amount) AS PMTD_Total_funded_amount FROM Financial_loan WHERE EXTRACT(MONTH FROM issue_date)=11 AND EXTRACT(YEAR FROM issue_date)=2021;

	pmtd_total_funded_amount 
1	47754825

7. Total Amount Received: SELECT SUM(total_payment) AS Total_amount_received FROM Financial_loan;

	total_amount_received bigint
1	473070933

8. MTD Total Amount Received: SELECT SUM(total_payment) AS MTD_Total_amount_received FROM Financial_loan
WHERE EXTRACT(MONTH FROM issue_date)=12 AND EXTRACT(YEAR FROM issue_date)=2021;

	mtd_total_amount_received bigint
1	58074380

9. PMTD Total Amount Received: SELECT SUM(total_payment) AS PMTD_Total_amount_received FROM Financial_loan
WHERE EXTRACT(MONTH FROM issue_date)=11 AND EXTRACT(YEAR FROM issue_date)=2021;

	pmtd_total_amount_received bigint
1	50132030

10. Average Interest Rate: SELECT ROUND(AVG(int_rate)*100 ,2) AS Avg_Int_Rate FROM Financial_Loan;

	avg_int_rate numeric
1	12.04

11. MTD Average Interest Rate: SELECT ROUND(AVG(int_rate)*100 ,2) AS MTD_Avg_Int_Rate FROM Financial_Loan
WHERE EXTRACT(MONTH FROM issue_date)=12 AND EXTRACT(YEAR FROM issue_date)=2021;

	mtd_avg_int_rate numeric
1	12.39

12. PMTD Average Interest Rate: SELECT ROUND(AVG(int_rate)*100 ,2) AS PMTD_Avg_Int_Rate FROM Financial_Loan
WHERE EXTRACT(MONTH FROM issue_date)=11 AND EXTRACT(YEAR FROM issue_date)=2021;

	pmtd_avg_int_rate numeric
1	11.97

13. Average DTI: SELECT ROUND(AVG(dti)*100 ,2) AS Avg_DTI FROM Financial_Loan;

	avg_dti numeric
1	13.33

14. MTD Average DTI: SELECT ROUND(AVG(dti)*100 ,2) AS MTD_Avg_DTI FROM Financial_Loan
WHERE EXTRACT(MONTH FROM issue_date)=12 AND EXTRACT(YEAR FROM issue_date)=2021;

	mtd_avg_dti numeric
1	13.68

15. PMTD Average DTI: SELECT ROUND(AVG(dti)*100 ,2) AS PMTD_Avg_DTI FROM Financial_Loan WHERE EXTRACT(MONTH FROM issue_date)=11 AND EXTRACT(YEAR FROM issue_date)=2021;

	pmt_avg_dti numeric
1	13.32

16. 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 Financial_loan;

	good_loan_percentage bigint
1	86

17. Good Loan Applications: SELECT COUNT(id) AS Good_loan_Applications FROM Financial_loan WHERE loan_status = 'Fully Paid' OR loan_status='Current';

	good_loan_applications bigint
1	33243

18. Good Loan Funded Amount: SELECT SUM(loan_amount) AS good_loan_funded_amount FROM Financial_loan WHERE loan_status IN ('Current', 'Fully Paid');

	good_loan_funded_amount bigint
1	370224850

19. Good Loan Amount Received: SELECT SUM(total_payment) AS good_loan_amount_received FROM Financial_loan WHERE loan_status IN ('Current', 'Fully Paid');

	good_loan_amount_received bigint
1	435786170

20. Bad Loan Percentage: SELECT(COUNT(CASE WHEN loan_status='Charged Off' THEN id END)*100)/COUNT(id) AS Bad_loan_percentage FROM Financial_loan;

	bad_loan_percentage
	bigint
1	13

21. Bad Loan Applications: SELECT COUNT(id) AS Bad_loan_Applications FROM Financial_loan WHERE loan_status = 'Charged Off';

	bad_loan_applications
	bigint
1	5333

22. Bad Loan Funded Amount: SELECT SUM(loan_amount) AS Bad_loan_funded_amount FROM Financial_loan WHERE loan_status IN ('Charged Off');

	bad_loan_funded_amount
	bigint
1	65532225

23. Bad Loan Amount Received: SELECT SUM(total_payment) AS bad_loan_amount_received FROM Financial_loan WHERE loan_status IN ('Charged Off');

	bad_loan_amount_received
	bigint
1	37284763

24. Loan Status:

```
SELECT loan_status,
COUNT(id) AS Total_Applications,
SUM(loan_amount) AS Total_Amount_Funded,
SUM(total_payment) ASBTotal_Amount_Received,
ROUND(AVG(int_rate)*100,2) AS Avg_Int_Rate,
ROUND(AVG (dti)*100,2) AS Avg_DTI
FROM Financial_loan
GROUP BY loan_status;
```

	loan_status	total_applications	total_amount_funded	asbttotal_amount_received	avg_int_rate	avg_dti
	character varying (50)	bigint	bigint	bigint	numeric	numeric
1	Current	1098	18866500	24199914	15.05	14.74
2	Fully Paid	32145	351358350	411586256	11.63	13.17
3	Charged Off	5333	65532225	37284763	13.86	14.01

```
SELECT loan_status,
SUM(loan_amount) AS MTD_Total_amount_funded,
SUM(total_payment) AS MTD_total_amount_received
FROM Financial_loan
WHERE EXTRACT(MONTH FROM issue_date)=12
AND
EXTRACT(YEAR FROM issue_date)=2021
```

GROUP BY loan_status;

	loan_status character varying (50)	mtd_total_amount_funded bigint	mtd_total_amount_received bigint
1	Charged Off	8732775	5324211
2	Current	3946625	4934318
3	Fully Paid	41302025	47815851

25.CHARTS:

ISSUE DATE:

```
SELECT TO_CHAR(issue_date,'Month') AS Month_Name,  
COUNT(id) AS Total_applications,  
SUM(loan_amount) AS total_amount_funded,  
SUM(total_payment) AS total_amount_received  
FROM Financial_loan  
GROUP BY TO_CHAR(issue_date,'Month'),EXTRACT(MONTH FROM issue_date)  
ORDER BY EXTRACT(MONTH FROM issue_date);
```

	month_name text	total_applications bigint	total_amount_funded bigint	total_amount_received bigint
1	January	2332	25031650	27578836
2	February	2279	24647825	27717745
3	March	2627	28875700	32264400
4	April	2755	29800800	32495533
5	May	2911	31738350	33750523
6	June	3184	34161475	36164533
7	July	3366	35813900	38827220
8	August	3441	38149600	42682218
9	September	3536	40907725	43983948
10	October	3796	44893800	49399567
11	November	4035	47754825	50132030
12	December	4314	53981425	58074380

ADDRESS STATE:

```
SELECT address_state,  
COUNT(id) AS Total_applications,  
SUM(loan_amount) AS total_amount_funded,  
SUM(total_payment) AS total_amount_received  
FROM Financial_loan  
GROUP BY address_state  
ORDER BY SUM(loan_amount) DESC;
```

--TOP 5

	address_state character varying (50) 🔒	total_applications bigint 🔒	total_amount_funded bigint 🔒	total_amount_received bigint 🔒
1	CA	6894	78484125	83901234
2	NY	3701	42077050	46108181
3	TX	2664	31236650	34392715
4	FL	2773	30046125	31601905
5	NJ	1822	21657475	23425159

TERM:

```
SELECT term,
COUNT(id) AS Total_applications,
SUM(loan_amount) AS total_amount_funded,
SUM(total_payment) AS total_amount_received
FROM Financial_loan
GROUP BY term
ORDER BY SUM(loan_amount) DESC;
```

	term character varying (50) 🔒	total_applications bigint 🔒	total_amount_funded bigint 🔒	total_amount_received bigint 🔒
1	36 months	28237	273041225	294709458
2	60 months	10339	162715850	178361475

EMP LENGTH:

```
SELECT emp_length,
COUNT(id) AS Total_applications,
SUM(loan_amount) AS total_amount_funded,
SUM(total_payment) AS total_amount_received
FROM Financial_loan
GROUP BY emp_length
ORDER BY SUM(loan_amount) DESC;
```

	emp_length character varying (50) 🔒	total_applications bigint 🔒	total_amount_funded bigint 🔒	total_amount_received bigint 🔒
1	10+ years	8870	116115950	125871616
2	2 years	4382	44967975	49206961
3	< 1 year	4575	44210625	47545011
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_applications,
SUM(loan_amount) AS total_amount_funded,
SUM(total_payment) AS total_amount_received
FROM Financial_loan
GROUP BY purpose
ORDER BY SUM(loan_amount) DESC;

```

	purpose character varying (50)	total_applications bigint	total_amount_funded bigint	total_amount_received bigint
1	Debt consolidation	18214	232459675	253801871
2	credit card	4998	58885175	65214084
3	home improvement	2876	33350775	36380930
4	other	3824	31155750	33289676
5	small business	1776	24123100	23814817
6	major purchase	2110	17251600	18676927
7	car	1497	10223575	11324914
8	wedding	928	9225800	10266856
9	medical	667	5533225	5851372
10	house	366	4824925	5185538
11	moving	559	3748125	3999899
12	educational	315	2161650	2248380
13	vacation	352	1967950	2116738
14	renewable_energy	94	845750	898931

HOME OWNERSHIP:

```

SELECT home_ownership,
COUNT(id) AS Total_applications,
SUM(loan_amount) AS total_amount_funded,
SUM(total_payment) AS total_amount_received
FROM Financial_loan
GROUP BY home_ownership
ORDER BY SUM(loan_amount) DESC;

```

	home_ownership character varying (50)	total_applications bigint	total_amount_funded bigint	total_amount_received bigint
1	MORTGAGE	17198	219329150	238474438
2	RENT	18439	185768475	201823056
3	OWN	2838	29597675	31729129
4	OTHER	98	1044975	1025257
5	NONE	3	16800	19053