


## SQL CODES AND OUTPUT

### KPI's


#### Total loan Applications

```
SELECT COUNT(id) AS Total_Loan_Applications FROM financial_loan;
```

	total_loan_applications 
1	38576


#### MTD Total loan application

```
SELECT COUNT(id) AS MTD_Total_Loan_Applications FROM financial_loan  
WHERE EXTRACT (MONTH FROM issue_date) = 12 ;
```

	mtd_total_loan_applications 
1	4314

#### PMTD Total loan application

```
SELECT COUNT(id) AS PMTD_Total_Loan_Applications FROM financial_loan  
WHERE EXTRACT (MONTH FROM issue_date) = 11 ;
```

	pmtd_total_loan_applications 
1	4035

---

### MoM Growth Total loan application

select

$(a.MTD\_Total\_Loan\_Applications - b.PMTD\_Total\_Loan\_Applications) * 100.0 / b.PMTD\_Total\_Loan\_Applications$   
AS MoM

FROM


(SELECT COUNT(id) AS MTD\_Total\_Loan\_Applications FROM financial\_loan

WHERE EXTRACT (MONTH FROM issue\_date) = 12) AS a

cross join

(SELECT COUNT(id) AS PMTD\_Total\_Loan\_Applications FROM financial\_loan


WHERE EXTRACT (MONTH FROM issue\_date) = 11) AS b

	<b>mom</b> numeric 
1	6.9144981412639405

---

### Total Funded Amount

SELECT SUM(loan\_amount)AS Total\_Funded\_Amount FROM financial\_loan;

	<b>total_funded_amount</b> numeric 
1	435757075

### MTD Total Funded Amount

SELECT SUM(loan\_amount)AS MTD\_Total\_Funded\_Amount FROM financial\_loan

WHERE EXTRACT (MONTH FROM issue\_date)=12;

	<b>mtd_total_funded_amount</b> numeric 
1	53981425

### PMTD Total Funded Amount

SELECT SUM(loan\_amount)AS PMTD\_Total\_Funded\_Amount FROM financial\_loan

WHERE EXTRACT (MONTH FROM issue\_date)=11;

	pmtd_total_funded_amount numeric
1	47754825

### MoM Growth Total Funded Amount

SELECT

$(a.MTD\_Total\_Funded\_Amount - b.PMTD\_Total\_Funded\_Amount) * 100 / b.PMTD\_Total\_Funded\_Amount$  AS MoM

FROM

(SELECT SUM(loan\_amount) AS MTD\_Total\_Funded\_Amount FROM financial\_loan

WHERE EXTRACT (MONTH FROM issue\_date)=12) AS a

CROSS JOIN

(SELECT SUM(loan\_amount) AS PMTD\_Total\_Funded\_Amount FROM financial\_loan

WHERE EXTRACT (MONTH FROM issue\_date)=11) AS b

	mom numeric
1	13.0386824786814735

---

### Total Amount Received

SELECT SUM(total\_payment) AS Total\_Received\_Amount FROM financial\_loan;

	total_recieved_amount numeric
1	473070933

### Total MTD Amount Received

SELECT SUM(total\_payment) AS MTD\_Total\_Received\_Amount FROM financial\_loan

WHERE EXTRACT (MONTH FROM issue\_date)=12;

	mtd_total_received_amount numeric
1	58074380

### Total PMTD Amount Received

```
SELECT SUM(total_payment) AS PMTD_Total_Received_Amount FROM financial_loan  
WHERE EXTRACT (MONTH FROM issue_date)=11;
```

	pmtd_total_received_amount numeric
1	50132030

---

### Average Interest Rate

```
SELECT ROUND(AVG(int_rate)*100,2)AS Avg_interest_rate  
FROM financial_loan;
```

	avg_interest_rate numeric
1	12.05

### MTD Average Interest Rate

```
SELECT ROUND(AVG(int_rate)*100,2)AS MTD_Avg_interest_rate  
FROM financial_loan  
WHERE EXTRACT (MONTH FROM issue_date)=12;
```

	mtd_avg_interest_rate numeric
1	12.36

### PMTD Average Interest Rate

```
SELECT ROUND(AVG(int_rate)*100,2)AS PMTD_Avg_interest_rate  
FROM financial_loan  
WHERE EXTRACT (MONTH FROM issue_date)=11;
```

	pmtd_avg_interest_rate numeric
1	11.94

### Average DTI

```
SELECT ROUND(AVG(dti)*100,2)AS Avg_DTI  
FROM financial_loan
```

	avg_dti numeric
1	13.33

### MTD Average DTI

```
SELECT ROUND(AVG(dti)*100,2)AS Avg_DTI  
FROM financial_loan  
WHERE EXTRACT (MONTH FROM issue_date)=12;
```

	avg_mtd_dti numeric
1	13.67

### PMTD Average DTI

```
SELECT ROUND(AVG(dti)*100,2)AS Avg_PDTI  
FROM financial_loan  
WHERE EXTRACT (MONTH FROM issue_date)=11;
```

	avg_pmdt_dti numeric
1	13.30

---

### GOOD LOAN ISSUED

#### Good loan percent

```
SELECT ROUND(SUM(CASE WHEN loan_status='Fully Paid' OR loan_status='Current' THEN 1  
END)*100.0/COUNT(*),2) AS Good_Loan_Percent  
FROM Financial_loan;
```

	good_loan_percent numeric
1	86.18

### Good Loan Applications

```
SELECT COUNT(*) AS Good_Loan_Application  
FROM financial_loan  
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current';
```

	good_loan_application bigint
1	33243

### Good Loan Funded Amount

```
SELECT SUM(loan_amount)AS Good_loan_Funded_Amount  
FROM financial_loan  
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current'
```

	good_loan_funded_amount numeric
1	370224850

### Good Loan Amount Received

```
SELECT SUM(total_payment)AS Good_loan_Amount_Received  
FROM financial_loan  
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current';
```

	good_loan_amount_received numeric
1	435786170

### BAD LOAN ISSUED

#### Bad Loan Percent

```
SELECT SUM(CASE WHEN loan_status = 'Charged Off' THEN 1 END)*100.0/COUNT(*) AS  
Bad_Loan_Percent FROM Financial_loan;
```

	bad_loan_percent numeric
1	13.82

### Bad Loan Application

```
SELECT COUNT(*) AS Bad_Loan_Application  
FROM financial_loan WHERE loan_status = 'Charged Off';
```

	bad_loan_application bigint
1	5333

### Bad Loan Funded Amount

```
SELECT SUM(loan_amount)AS Bad_loan_Funded_Amount  
FROM financial_loan WHERE loan_status = 'Charged Off';
```

	bad_loan_funded_amount numeric
1	65532225

### Bad Loan Amount Received

```
SELECT SUM(total_payment)AS Bad_loan_Amount_Received  
FROM financial_loan WHERE loan_status ='Charged Off';
```

	bad_loan_amount_received numeric
1	37284763

## LOAN STATUS

```
SELECT loan_status,  
       COUNT(id)AS loan_Count,  
       SUM(loan_amount)AS Total_Amount_Funded,  
       SUM(total_payment)AS Total_Amount_Received,  
       ROUND(AVG(int_rate)*100.0,2)AS Interest_Rate,  
       ROUND(AVG(dti)*100.0,2)AS DTI  
FROM financial_loan  
GROUP BY loan_status;
```

	loan_status character varying (50)	loan_count bigint	total_amount_funded numeric	total_amount_received numeric	interest_rate numeric	dti numeric
1	Current	1098	18866500	24199914	15.10	14.72
2	Fully Paid	32145	351358350	411586256	11.64	13.17
3	Charged Off	5333	65532225	37284763	13.88	14.00

```
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  
GROUP BY loan_status;
```

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



BANK LOAN REPORT | OVERVIEW

MONTH

```
SELECT
    EXTRACT(MONTH FROM issue_date) AS Month,
    TO_CHAR(issue_date,'month'),
    COUNT(id) AS Total_Loan_Application,
    SUM(loan_amount)AS Total_Amount_Funded,
    SUM(total_payment)AS Total_Amount_Received
FROM financial_loan
GROUP BY EXTRACT(MONTH FROM issue_date),TO_CHAR(issue_date,'month')
ORDER BY EXTRACT(MONTH FROM issue_date);
```

	month_number numeric	month text	total_loan_application bigint	total_amount_funded numeric	total_amount_received numeric
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	septem...	3536	40907725	43983948
10	10	october	3796	44893800	49399567
11	11	novemb...	4035	47754825	50132030
12	12	decemb...	4314	53981425	58074380

```

SELECT

    address_state AS State,

    COUNT(id) AS Total_Loan_Application,

    SUM(loan_amount)AS Total_Amount_Funded,

    SUM(total_payment)AS Total_Amount_Received

FROM financial_loan

GROUP BY address_state

ORDER BY address_state;

```

	state character varying (50) 🔒	total_loan_application bigint 🔒	total_amount_funded numeric 🔒	total_amount_received numeric 🔒
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
40	SC	464	5080475	5462458
41	SD	63	606150	656514
42	TN	17	162175	141522
43	TX	2664	31236650	34392715
44	UT	252	2849225	2952412
45	VA	1375	15982650	17711443
46	VT	54	504100	534973
47	WA	805	8855525	9531739
48	WI	446	5070450	5485161
49	WV	167	1830525	1991936
50	WY	79	890750	1046050

SELECT

term AS Term,

COUNT(id) AS Total\_Loan\_Application,

SUM(loan\_amount)AS Total\_Amount\_Funded,

SUM(total\_payment)AS Total\_Amount\_Received

FROM financial\_loan

GROUP BY term;

	term character varying (20) 🔒	total_loan_application bigint 🔒	total_amount_funded numeric 🔒	total_amount_received numeric 🔒
1	36 months	28237	273041225	294709458
2	60 months	10339	162715850	178361475

## EMPLOYEE LENGTH

SELECT

emp\_length,

COUNT(id) AS Total\_Loan\_Application,

SUM(loan\_amount)AS Total\_Amount\_Funded,

SUM(total\_payment)AS Total\_Amount\_Received

FROM financial\_loan

GROUP BY emp\_length

ORDER BY emp\_length;

	emp_length character varying (50) 🔒	total_loan_application bigint 🔒	total_amount_funded numeric 🔒	total_amount_received numeric 🔒
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,

COUNT(id) AS Total\_Loan\_Application,

SUM(loan\_amount)AS Total\_Amount\_Funded,

SUM(total\_payment)AS Total\_Amount\_Received

FROM financial\_loan

GROUP BY purpose

ORDER BY purpose;

	<b>purpose</b> character varying (100) 🔒	<b>total_loan_application</b> bigint 🔒	<b>total_amount_funded</b> numeric 🔒	<b>total_amount_received</b> numeric 🔒
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,

COUNT(id) AS Total\_Loan\_Application,

SUM(loan\_amount)AS Total\_Amount\_Funded,

SUM(total\_payment)AS Total\_Amount\_Received

FROM financial\_loan

GROUP BY home\_ownership

ORDER BY home\_ownership;

	<b>home_ownership</b> character varying (20) 🔒	<b>total_loan_application</b> bigint 🔒	<b>total_amount_funded</b> numeric 🔒	<b>total_amount_received</b> numeric 🔒
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