

## CREDIT ANALYSIS REPORT SQL QUERY

### Credit Analysis Report | Summary

#### Key Performance Indicators:

##### Total Loan Applications

```
SELECT COUNT(id) AS Total_Applications FROM bank_loan_data
```

	total_loan_application
1	38576

##### MTD Loan Applications

```
SELECT COUNT(id) AS Total_Applications FROM bank_loan_data  
WHERE MONTH(issue_date) = 12
```

	MTD_total_loan_application
1	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 financial_loan_data
```

	Total_funded_amount
1	435757075

##### MTD Total Funded Amount

```
select sum(loan_amount) as MTD_Total_funded_amount from financial_loan_data  
where month(issue_date) = 12 and year(issue_date) = 2021
```

##### 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_received from financial_loan_data
```

	total_amount_received
1	473070933

## MTD – PMTD Total Amount Received

```
select sum(total_payment) as mtdtotal_amount_received from financial_loan_data
where month(issue_date) = 12 and year(issue_date) = 2021
--previous month
select sum(total_payment) as pmtddtotal_amount_received from financial_loan_data
where month(issue_date) = 11 and year(issue_date) = 2021
```

	mtdtotal_amount_received
1	58074380

	pmtddtotal_amount_received
1	50132030

## Average Interest Rate

```
--- average interest rates
select avg(int_rate) * 100 as Average_interest_rate from financial_loan_data
```

	Average_interest_rate
1	12.0488314172048

## MTD - PMTD Average Interest

```
---Mtd_Average_interest_rate
select round(avg(int_rate),4) * 100 as Mtd_Average_interest_rate from financial_loan_data
where month(issue_date) = 12 and year(issue_date) = 2021
--previous month
select round(avg(int_rate),4) * 100 as Mtd_Average_interest_rate from financial_loan_data
where month(issue_date) = 11 and year(issue_date) = 2021
```

	Mtd_Average_interest_rate
1	11.94

## Avg DTI

```
---Average_debt_to_income_ratio
select round(avg(dti),4) * 100 as Average_debt_to_income_ratio from financial_loan_data
---mtd_Average_debt_to_income_ratio
select round(avg(dti),4) * 100 as mtdAverage_debt_to_income_ratio from financial_loan_data
where month(issue_date) = 11 and year(issue_date) = 2021
select round(avg(dti),4) * 100 as pmtdAverage_debt_to_income_ratio from financial_loan_data
where month(issue_date) = 11 and year(issue_date) = 2021
```

Average_debt_to_income_ratio
13.33
mtdAverage_debt_to_income_ratio
13.3
pmtdAverage_debt_to_income_ratio
13.3

## GOOD CREDIT ISSUED

### Good Loan Percentage

```

---GOOD loan percentage
---Calculation : Fully Paid or Current divided by total application *100
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_data

```

GOOD_LOAN_PERCENTAGE
86

### Good Credit Applications

```

---GOOD loan Application
select count(loan_status) as good_loan_application from financial_loan_data
where loan_status in ('Fully Paid','Current') --- where loan_status = 'Fully Paid' or 'Current'

```

good_loan_application
33243

### Good Credit Funded Amount and Amount Received

```

---GOOD loan Funded Amount
select sum(loan_amount) as GOOD_loan_Funded_Amount from financial_loan_data
where loan_status in ('Fully Paid','Current')

```

```

---GOOD_loan_Received amount
select sum(total_payment) as GOOD_loan_Received_Amount from financial_loan_data
where loan_status in ('Fully Paid','Current')

```

GOOD_loan_Funded_Amount
370224850
GOOD_loan_Received_Amount
435786170

## **BAD CREDIT ISSUED**

### **Bad Loan Percentage and Loan Applications**

```
---Bad loan Application
select count(id) as Bad_loan_application from financial_loan_data
where loan_status = 'Charged off'

---Bad loan Application percentage
select
(count(case when loan_status = 'Charged off' THEN id end) * 100 )
/
count(id) as Bad_loan_percentage
from financial_loan_data
```

Bad_loan_application
5333

Bad_loan_percentage
13

### **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

```
---details of loan
select
    loan_status,
    count(id) as Total_loan_application,
    sum(total_payment) as Total_payment_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
```

	loan_status	Total_loan_application	Total_payment_received	total_funded_AMOUNT	Interest_rate	DTI
1	Fully Paid	3452	47815851	41302025	11.7703332126503	13.3745451938834
2	Charged Off	649	5324211	8732775	14.2535593842826	14.7357627137411
3	Current	213	4934318	3946625	16.0667136731282	15.1206103620281

## 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

```
---employee_data
select
emp_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
```

---

	emp_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

```
--Purpose of loan
select
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 count(id) desc
```

## HOME OWNERSHIP

```
---Home ownership analysis
select
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 count(id) desc
```

---

	home_ownership	Total_loan_applications	total_funded_amount	Total_amount_received
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

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