

BANK LOAN

KPI'S

Total Number of Applications

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

Total_loan_applications
38576

Application MTD

```
SELECT COUNT(ID) AS MTD_loan_application  
FROM financial_loan  
WHERE MONTH(issue_date)=12;
```

MTD_loan_application
4314

Application PMTD

```
SELECT COUNT(ID) AS PMTD_loan_application  
FROM financial_loan  
WHERE MONTH(issue_date)=11;
```

PMTD_loan_application
4035

Month-wise Applications

```
SELECT MONTH(issue_date) AS No, MONTHNAME(issue_date) AS Month, COUNT(ID) AS  
MTD_loan_application  
FROM financial_loan  
GROUP BY Month,No  
ORDER BY No;
```

No	Month	loan_application
1	January	2332
2	February	2279
3	March	2627
4	April	2755
5	May	2911
6	June	3184
7	July	3366
8	August	3441
9	September	3536
10	October	3796
11	November	4035
12	December	4314

Funded Amount

Funded Amount

```
SELECT ROUND(SUM(loan_amount)/1000000,2) as funded_amt_Million FROM financial_loan;
```

funded_amt_Million
435.76

Funded amt MTD

```
SELECT ROUND(SUM(loan_amount)/1000000,2) as MTD_funded_amt_Million  
FROM financial_loan  
WHERE Month(issue_date)=12;
```

MTD_funded_amt_Million
53.98

Funded Amt PMTD

```
SELECT ROUND(SUM(loan_amount)/1000000,2) as MTD_funded_amt_Million  
FROM financial_loan  
WHERE Month(issue_date)=11;
```

PMTD_funded_amt_Million
47.75

Month-wise Funded Amount distribution

```
SELECT MONTH(issue_date) AS No, MONTHNAME(issue_date) AS Month,  
ROUND(SUM(loan_amount)/1000000,2) as funded_amt_Million  
FROM financial_loan  
GROUP BY Month, No  
ORDER BY No;
```

No	Month	funded_amt_Million
1	January	25.03
2	February	24.65
3	March	28.88
4	April	29.80
5	May	31.74
6	June	34.16
7	July	35.81
8	August	38.15
9	September	40.91
10	October	44.89
11	November	47.75
12	December	53.98

Payment Received

Total payment amount

SELECT ROUND(SUM(total_payment)/1000000,2) as Total_payment FROM financial_loan;

Total_payment_Million
473.07

Payment Received MTD

SELECT ROUND(SUM(total_payment)/1000000,2) as MTD_Payment_received_Million
FROM financial_loan
WHERE Month(issue_date)=12;

MTD_Payment_received_Million
58.07

Payment Received PMTD

SELECT ROUND(SUM(total_payment)/1000000,2) as MTD_Payment_received_Million
FROM financial_loan
WHERE Month(issue_date)=11;

PMTD_Payment_received_Million
50.13

Month-wise Payment Received distribution

SELECT
 MONTH(issue_date) AS No, MONTHNAME(issue_date) AS Month,
 ROUND(SUM(total_payment)/1000000,2) as funded_amt_Million
FROM financial_loan
GROUP BY Month, No
ORDER BY No;

No	Month	funded_amt_Million
1	January	27.58
2	February	27.72
3	March	32.26
4	April	32.50
5	May	33.75
6	June	36.16
7	July	38.83
8	August	42.68
9	September	43.98
10	October	49.40
11	November	50.13
12	December	58.07

Interest Rate

Average interest rate

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

Average_interest_rate
12.05

MTD Average Interest

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

MTD_Avg_Int_Rate
12.36

PMTD Average Interest

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

PMTD_Avg_Int_Rate
11.94

Debt to Income Ratio

Average Debt to Income Ratio

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

avg_dti
13.33

MTD Avg DTI

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

MTD_Avg_DTI
13.67

PMTD Avg DTI

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

PMTD_Avg_DTI
13.3

GOOD LOAN

Application Percantage

```
SELECT  
    ROUND(((COUNT(CASE WHEN loan_status='Fully Paid' OR loan_status='Current' THEN id  
        END))/COUNT(id)) *100,2) AS Good_loan_percentage  
FROM financial_loan;
```

Good_loan_app_percentage
86.18

Total loan application

```
SELECT COUNT(id) as Total_good_loan_application  
FROM financial_loan  
WHERE loan_status='Fully Paid' OR loan_status='Current';
```

Total_good_loan_application
33243

FUNDED AMT

```
SELECT SUM(loan_amount) as Total_funded_amt  
FROM financial_loan  
WHERE loan_status IN ('Fully Paid','Current');
```

Total_funded_amt_Million
370.22

total payment

```
SELECT SUM(total_payment) as Total_funded_amt  
FROM financial_loan  
WHERE loan_status IN ('Fully Paid','Current');
```

Total_payment_receved_Million
435.79

BAD LOAN

Application Percantage

```
SELECT  
    ROUND(((COUNT(CASE WHEN loan_status='Charged Off' THEN id END))/  
    COUNT(id)) *100,2) AS Bad_loan_percentage  
FROM financial_loan;
```

Bad_loan_percentage
13.82

Total loan application

```
SELECT COUNT(id) as Bad_loan_application  
FROM financial_loan  
WHERE loan_status='Charged Off';
```

Bad_loan_application
5333

FUNDED AMT

```
SELECT SUM(loan_amount) as Bad_funded_amount  
FROM financial_loan  
WHERE loan_status='Charged Off';
```

Bad_funded_amount_Million
65.53

Total payment

```
SELECT SUM(total_payment) as Bad_payment_received  
FROM financial_loan  
WHERE loan_status='Charged Off';
```

Bad_payment_receieved_Million
37.28

LOAN STATUS

SELECT

```
    loan_status,
    COUNT(id) AS Number_of_applications,
    ROUND(SUM(total_payment)/1000000,2) AS Total_amount_received_Million,
    ROUND(SUM(loan_amount)/1000000,2) AS Total_funded_amount_Million,
    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	Number_of_applications	Total_amount_receivied_Million	Total_funded_amount_Million	Avg_int_rate	Avg_dti
Charged Off	5333	37.28	65.53	13.88	14
Fully Paid	32145	411.59	351.36	11.64	13.17
Current	1098	24.20	18.87	15.1	14.72

loan status by home ownership type

SELECT

```
    home_ownership,
    loan_status,
    COUNT(id) AS Number_of_applications,
    ROUND(SUM(total_payment)/1000000,2) AS Total_amount_received_Million,
    ROUND(SUM(loan_amount)/1000000,2) AS Total_funded_amount_Million,
    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,home_ownership

ORDER BY home_ownership;

home_ownership	Number_of_applications	Total_amount_receivied_Million	Total_funded_amount_Million	Avg_int_rate	Avg_dti
MORTGAGE	17198	238.47	219.33	11.8	13.17
NONE	3	0.02	0.02	8.7	11.75
OTHER	98	1.03	1.04	12.04	11.25
OWN	2838	31.73	29.60	11.89	13.24
RENT	18439	201.82	185.77	12.3	13.5

Loan Status by Month wise

```
SELECT
    MONTH(issue_date) AS No,
    MONTHNAME(issue_date) AS Month,
    COUNT(id) AS Total_loan_application,
    ROUND(SUM(loan_amount)/1000000,2) AS Total_funded_amt_Million,
    ROUND(SUM(total_payment) /1000000,2) AS Total_amt_received_Million
FROM financial_loan
GROUP BY No,Month
ORDER BY No;
```

No	Month	Total_loan_application	Total_amount_receieved_Million	Total_funded_amount_Million
1	January	2332	27.58	25.03
2	February	2279	27.72	24.65
3	March	2627	32.26	28.88
4	April	2755	32.50	29.80
5	May	2911	33.75	31.74
6	June	3184	36.16	34.16
7	July	3366	38.83	35.81
8	August	3441	42.68	38.15
9	September	3536	43.98	40.91
10	October	3796	49.40	44.89
11	November	4035	50.13	47.75
12	December	4314	58.07	53.98

Loan Status by City

```
SELECT
    address_state,
    COUNT(id) AS Total_loan_application,
    ROUND(SUM(loan_amount)/1000000,2) AS Total_funded_amt_Million,
    ROUND(SUM(total_payment) /1000000,2) AS Total_amt_received_Million
FROM financial_loan
GROUP BY address_state
ORDER BY Total_funded_amt DESC
LIMIT 10;
```

address_state	Total_loan_application	Total_amount_receieved_Million	Total_funded_amount_Million
CA	6894	83.90	78.48
NY	3701	46.11	42.08
TX	2664	34.39	31.24
FL	2773	31.60	30.05
NJ	1822	23.43	21.66
IL	1486	18.88	17.12
VA	1375	17.71	15.98
PA	1482	17.46	15.83
GA	1355	16.73	15.48
MA	1310	16.68	15.05

Loan Status by Term analysis

```
SELECT
    term,
    COUNT(id) AS Total_loan_application,
    ROUND(SUM(loan_amount)/1000000,2) AS Total_funded_amt_Million,
    ROUND(SUM(total_payment) /1000000,2) AS Total_amt_received_Million
FROM financial_loan
GROUP BY term
ORDER BY Total_funded_amt DESC;
```

term	Total_loan_application	Total_amount_receieved_Million	Total_funded_amount_Million
36 months	28237	294.71	273.04
60 months	10339	178.36	162.72

Loan Status by emp_length

```
SELECT
    emp_length,
    COUNT(id) AS Total_loan_application,
    ROUND(SUM(loan_amount)/1000000,2) AS Total_funded_amt_Million,
    ROUND(SUM(total_payment) /1000000,2) AS Total_amt_received_Million
FROM financial_loan
GROUP BY emp_length
ORDER BY Total_funded_amt DESC;
```

emp_length	Total_loan_application	Total_amount_receieved_Million	Total_funded_amount_Million
10+ years	8870	125.87	116.12
2 years	4382	49.21	44.97
< 1 year	4575	47.55	44.21
3 years	4088	47.55	43.94
4 years	3428	40.96	37.60
5 years	3273	40.40	36.97
1 year	3229	35.50	32.88
6 years	2228	27.91	25.61
7 years	1772	22.58	20.81
8 years	1476	19.03	17.56
9 years	1255	16.52	15.08

Loan Status by Purpose

SELECT

purpose,

COUNT(id) AS Total_loan_application,

ROUND(SUM(loan_amount)/1000000,2) AS Total_funded_amt_Million,

ROUND(SUM(total_payment) /1000000,2) AS Total_amt_received_Million

FROM financial_loan

GROUP BY purpose

ORDER BY Total_funded_amt DESC;

purpose	Total_loan_application	Total_amount_receved_Million	Total_funded_amount_Million
Debt consolidation	18214	253.80	232.46
credit card	4998	65.21	58.89
home improvement	2876	36.38	33.35
other	3824	33.29	31.16
small business	1776	23.81	24.12
major purchase	2110	18.68	17.25
car	1497	11.32	10.22
wedding	928	10.27	9.23
medical	667	5.85	5.53
house	366	5.19	4.82
moving	559	4.00	3.75
educational	315	2.25	2.16
vacation	352	2.12	1.97
renewable_energy	94	0.90	0.85