

BANK LOAN REPORT QUERY DOCUMENT

BANK LOAN REPORT | SUMMARY

KPI's:

Total Loan Applications

```
select count (*) as total_loan_application from bank_loan_data;
```

| | total_loan_applications | bigint |
|---|-------------------------|--------|
| 1 | | 38576 |

MTD Loan applications

```
select count (*) AS MTD_loan_applications from  
bank_loan_data  
where to_char(issue_date,'MM') = '12';
```

| | mtd_loan_applications | bigint |
|---|-----------------------|--------|
| 1 | | 4314 |

PMTD Loan applications

```
select count (*) as PMTD_Loan_applications  
from bank_loan_data  
where extract(month from issue_date)=11;
```

| | pmtd_loan_applications | bigint |
|---|------------------------|--------|
| 1 | | 4035 |

Total Funded amount

```
select sum(loan_amount) as total_funded_amount  
from bank_loan_data;
```

| | total_funded_amount | bigint |
|---|---------------------|-----------|
| 1 | | 435757075 |

MTD Funded amount

```
select sum(loan_amount) as MTD_Funded_amount  
from bank_loan_data  
where extract (month from issue_date)=12;
```

| | mtd_funded_amount | bigint |
|---|-------------------|----------|
| 1 | | 53981425 |

PMTD Funded Amount

```
select sum(loan_amount) as PMTD_Funded_amount  
from bank_loan_data  
where to_char(issue_date,'MM')='12';
```

| | pmtd_funded_amount | bigint |
|---|--------------------|----------|
| 1 | | 53981425 |

Total Amount received

```
select sum(total_payment) as total_amount_received  
from bank_loan_data;
```

| | total_amount_received | bigint |
|---|-----------------------|-----------|
| 1 | | 473070933 |

MTD Total amount received

```
select sum(total_payment) as MTD_total_amount_received  
from bank_loan_data  
where extract(month from issue_date)=12;
```

| | mtd_total_amount_received | bigint |
|---|---------------------------|----------|
| 1 | | 58074380 |

PMTD Total amount received

```
select sum(total_payment) as PMTD_total_amount_received  
from bank_loan_data  
where extract(month from issue_date)=11;
```

| | pmtd_total_amount_received | bigint |
|---|----------------------------|----------|
| 1 | | 50132030 |

Average interest rate

```
select Round(avg(int_rate)::numeric,4) as avg_intrest_rate  
from bank_loan_data;
```

| | avg_intrest_rate | numeric |
|---|------------------|---------|
| 1 | | 0.1205 |

MTD average interest rate

```
select Round(avg(int_rate)::numeric,4) as MTD_avg_intrest_rate  
from bank_loan_data  
where extract(month from issue_date)=12;
```

| | mtd_avg_intrest_rate | numeric |
|---|----------------------|---------|
| 1 | | 0.1236 |

PMTD average interest rate

```
select Round(avg(int_rate)::numeric,4) as PMTD_avg_intrest_rate  
from bank_loan_data  
where extract(month from issue_date)=11;
```

| | pmtd_avg_intrest_rate | numeric |
|---|-----------------------|---------|
| 1 | | 0.1194 |

Average Debt-to-Income Ratio (DTI)

```
select Round(avg(dtি)::numeric,4) as dti_avg_intrest_rate  
from bank_loan_data;
```

| | dti_avg_intrest_rate | numeric |
|---|----------------------|---------|
| 1 | | 0.1333 |

MTD dti_to_income avg interest rate

```
select Round(avg(dtি)::numeric,4) as dti_MTD_avg_intrest_rate  
from bank_loan_data  
where extract (month from issue_date)=12;
```

| | dti_mtd_avg_intrest_rate | numeric |
|---|--------------------------|---------|
| 1 | | 0.1367 |

PMTD dti_to_income average interest rate

```
select Round(avg(dtি)::numeric,4) as dti_PMTD_avg_intrest_rate  
from bank_loan_data  
where extract (month from issue_date)=11;
```

| | dti_pmtd_avg_intrest_rate | numeric |
|---|---------------------------|---------|
| 1 | | 0.1330 |

Good loan KIPS

Good loan percentage

```
select  
(count(case when loan_status in ('Fully Paid','Current') then id end) * 100.0) /count(id) as  
Good_loan_percentage  
from bank_loan_data;
```

| | |
|---|-------------------------------|
| | good_loan_percentage 🔒 |
| 1 | 86.1753421816673579 |

Good loan Total loan applications

```
select count (*) as good_loan_total_applications
from bank_loan_data
where loan_status in ('Fully Paid','Current');
```

| | |
|---|---------------------------------------|
| | good_loan_total_applications 🔒 |
| 1 | 33243 |

Good loan funded amount

```
select sum(loan_amount) as good_loan_funded_amount
from bank_loan_data
where loan_status in ('Fully Paid','Current')
```

| | |
|---|----------------------------------|
| | good_loan_funded_amount 🔒 |
| 1 | 370224850 |

Good loan total amount received

```
select sum(total_payment) as good_loan_total_amount_received
from bank_loan_data
where loan_status in ('Fully Paid','Current')
```

| | |
|---|--|
| | good_loan_total_amount_received 🔒 |
| 1 | 435786170 |

Bad loan KPIs

Bad loan total applications

```
select count (*) as bad_loan_applications  
from bank_loan_data  
where loan_status='Charged Off'
```

| | bad_loan_applications | bigint |
|---|-----------------------|--------|
| 1 | | 5333 |

bad loan percentage

```
select  
(count (case when loan_status='Charged Off' then id end) * 100.0) / count(id) as  
bad_loan_percentge  
from bank_loan_data;
```

| | bad_loan_percentge | numeric |
|---|--------------------|---------------------|
| 1 | | 13.8246578183326421 |

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 | bigint |
|---|------------------------|----------|
| 1 | | 65532225 |

bad loan total amount received

```
select sum(total_payment) as bad_loan_total_amount_received  
from bank_loan_data  
where loan_status ='Charged Off'
```

| | |
|---|---|
| | bad_loan_total_amount_received 🔒 |
| | bigint |
| 1 | 37284763 |

loan status

select

```
loan_status,
count(id) as total_loan_applications,
sum(loan_amount) as Total_funded_amount,
sum(total_payment) as Total_received_amount,
avg(int_rate) as avg_intrest_rate,
avg(dt) as avg_dti_rate
from bank_loan_data
group by loan_status;
```

| | loan_status character varying (50) 🔒 | total_loan_applications bigint | total_funded_amount bigint | total_received_amount bigint | avg_intrest_rate double precision | avg_dti_rate double precision |
|---|---|-----------------------------------|-------------------------------|---------------------------------|--------------------------------------|----------------------------------|
| 1 | Current | 1098 | 18866500 | 24199914 | 0.1509932604735884 | 0.14724344262295075 |
| 2 | Fully Paid | 32145 | 351358350 | 411586256 | 0.11641070773059622 | 0.13167350754394155 |
| 3 | Charged Off | 5333 | 65532225 | 37284763 | 0.13878574910931935 | 0.140047327957998 |

MTD Loan status

select

```
loan_status,
count(id) as total_loan_applications,
sum(loan_amount) as Total_funded_amount,
sum(total_payment) as Total_received_amount,
avg(int_rate) as avg_intrest_rate,
avg(dt) as avg_dti_rate
from bank_loan_data
where to_char(issue_date,'mm')='12'
group by loan_status;
```

| | loan_status character varying (50)  | total_loan_applications bigint  | total_funded_amount bigint  | total_received_amount bigint  | avg_intrest_rate double precision  | avg_dti_rate double precision  |
|---|---|---|---|---|--|--|
| 1 | Charged Off | 649 | 8732775 | 5324211 | 0.14253559322033935 | 0.14735762711864417 |
| 2 | Current | 213 | 3946625 | 4934318 | 0.1606671361502346 | 0.15120610328638492 |
| 3 | Fully Paid | 3452 | 41302025 | 47815851 | 0.11770333140208514 | 0.13374545191193524 |

Monthly Trends by Issue Date

select

```
to_char(issue_date,'mm') as month_number,
to_char(issue_date,'Month') 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 1,2
order by month_number asc
```

| | month_number text  | month_name text  | total_loan_applications bigint  | total_funded_amount bigint  | total_amount_received bigint  |
|----|--|--|---|---|---|
| 1 | 01 | January | 2332 | 25031650 | 27578836 |
| 2 | 02 | February | 2279 | 24647825 | 27717745 |
| 3 | 03 | March | 2627 | 28875700 | 32264400 |
| 4 | 04 | April | 2755 | 29800800 | 32495533 |
| 5 | 05 | May | 2911 | 31738350 | 33750523 |
| 6 | 06 | June | 3184 | 34161475 | 36164533 |
| 7 | 07 | July | 3366 | 35813900 | 38827220 |
| 8 | 08 | August | 3441 | 38149600 | 42682218 |
| 9 | 09 | September | 3536 | 40907725 | 43983948 |
| 10 | 10 | October | 3796 | 44893800 | 49399567 |
| 11 | 11 | November | 4035 | 47754825 | 50132030 |
| 12 | 12 | December | 4314 | 53981425 | 58074380 |

Regional Analysis by State

select

```
address_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 1

| | purpose character varying (50)  | total_loan_applications bigint  | total_funded_amount bigint  | total_amount_received bigint  |
|----|--|--|--|--|
| 1 | moving | 164 | 1069450 | 1099875 |
| 2 | major purchase | 796 | 5344575 | 5604259 |
| 3 | medical | 197 | 1471850 | 1526882 |
| 4 | educational | 79 | 484000 | 515639 |
| 5 | renewable_energy | 29 | 224150 | 225827 |
| 6 | Debt consolidation | 3753 | 37216300 | 38822971 |
| 7 | car | 577 | 3629475 | 3805538 |
| 8 | home improvement | 933 | 8359175 | 8744006 |
| 9 | house | 91 | 916575 | 957878 |
| 10 | small business | 334 | 3172075 | 3190467 |
| 11 | wedding | 237 | 2001725 | 2126202 |
| 12 | vacation | 122 | 683625 | 694542 |
| 13 | other | 1024 | 7043175 | 7397982 |
| 14 | credit card | 1353 | 12636075 | 13339495 |

Loan Term Analysis

select

```
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 1
```

| | term character varying (50)  | total_loan_applications bigint  | total_funded_amount bigint  | total_amount_received bigint  |
|---|--|---|---|---|
| 1 | 36 months | 28237 | 273041225 | 294709458 |
| 2 | 60 months | 10339 | 162715850 | 178361475 |

Employee Length Analysis

```
select
emp_length,
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 1
```

| | emp_length character varying (50)  | total_loan_applications bigint  | total_funded_amount bigint  | total_amount_received bigint  |
|----|--|---|---|---|
| 1 | 5 years | 3273 | 36973625 | 40397571 |
| 2 | 1 year | 3229 | 32883125 | 35498348 |
| 3 | 2 years | 4382 | 44967975 | 49206961 |
| 4 | 4 years | 3428 | 37600375 | 40964850 |
| 5 | < 1 year | 4575 | 44210625 | 47545011 |
| 6 | 3 years | 4088 | 43937850 | 47551832 |
| 7 | 6 years | 2228 | 25612650 | 27908658 |
| 8 | 8 years | 1476 | 17558950 | 19025777 |
| 9 | 7 years | 1772 | 20811725 | 22584136 |
| 10 | 9 years | 1255 | 15084225 | 16516173 |
| 11 | 10+ years | 8870 | 116115950 | 125871616 |

Loan Purpose Breakdown

```
select
purpose,
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 1

```

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

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 bank_loan_data
group by 1

```

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

loan purpose off A grade

select

purpose,

count(id) as total_loan_applications,
sum(loan_amount) as total_funded_amount,
sum(total_payment) as total_amount_received

from bank_loan_data

where grade='A'

group by 1

| | purpose character varying (50)  | total_loan_applications bigint  | total_funded_amount bigint  | total_amount_received bigint  |
|----|---|---|---|---|
| 1 | moving | 164 | 1069450 | 1099875 |
| 2 | major purchase | 796 | 5344575 | 5604259 |
| 3 | medical | 197 | 1471850 | 1526882 |
| 4 | educational | 79 | 484000 | 515639 |
| 5 | renewable_energy | 29 | 224150 | 225827 |
| 6 | Debt consolidation | 3753 | 37216300 | 38822971 |
| 7 | car | 577 | 3629475 | 3805538 |
| 8 | home improvement | 933 | 8359175 | 8744006 |
| 9 | house | 91 | 916575 | 957878 |
| 10 | small business | 334 | 3172075 | 3190467 |
| 11 | wedding | 237 | 2001725 | 2126202 |
| 12 | vacation | 122 | 683625 | 694542 |
| 13 | other | 1024 | 7043175 | 7397982 |
| 14 | credit card | 1353 | 12636075 | 13339495 |