

# 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';
```

	pmt_d_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(dti)::numeric,4) as dti_avg_intrest_rate
```

```
from bank_loan_data;
```

	dti_avg_intrest_rate numeric
1	0.1333

### MTD detp\_to\_income avg interest rate

```
select Round(avg(dti)::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 detp\_to\_income average interest rate

```
select Round(avg(dti)::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 numeric
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 bigint
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 bigint
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 bigint
1	435786170

### Bad loan KPIS

#### Bad loan total applications

```
select count (*) as bad_loan_appications
```

```
from bank_loan_data
```

```
where loan_status='Charged Off'
```

	bad_loan_appications 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(dti) 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 (dti) 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

	<b>purpose</b> character varying (50) 🔒	<b>total_loan_applications</b> bigint 🔒	<b>total_funded_amount</b> bigint 🔒	<b>total_amount_received</b> 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
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