

BANK LOAN REPORT QUERY DOCUMENT

A. BANK LOAN REPORT | SUMMARY

KPI's:

Total Loan Applications

```
-- 1)total loan applivations
SELECT
    COUNT(id) AS total_loan_applications
FROM
    loan_data;
```

	total_loan_applications
▶	38576

MTD Loan Applications

```
SELECT
    COUNT(id) AS MTD_total_loan_applications
FROM
    loan_data where month(issue_date)=12 AND year(issue_date)=2021 ;
```

	MTD_total_loan_applications
▶	4314

PMTD Loan Applications

```
SELECT
    COUNT(id) AS PMTD_total_loan_applications
FROM
    loan_data
WHERE
    MONTH(issue_date) = 11
    AND YEAR(issue_date) = 2021;
```

	PMTD_total_loan_applications
▶	4035

Total Funded Amount

```
select sum(loan_amount) as Total_Funded_Amount from loan_data;
```

	Total_Funded_Amount
▶	435757075

MTD Total Funded Amount

```
select sum(loan_amount) as MTD_Total_Funded_Amount from loan_data  
where month(issue_date)=12;
```

	MTD_Total_Funded_Amount
▶	53981425

PMTD Total Funded Amount

```
SELECT  
    SUM(loan_amount) AS PMTD_Total_Funded_Amount  
FROM  
    loan_data  
WHERE  
    MONTH(issue_date) = 11 and year(issue_date)=2021;
```

	PMTD_Total_Funded_Amount
▶	47754825

Total Amount Received

```
select sum(total_payment) as Total_Amount_Received from loan_data;
```

	Total_Amount_Received
▶	473070933

MTD Total Amount Received

```
SELECT  
    SUM(total_payment) AS MTD_Total_Amount_Received  
FROM  
    loan_data  
where month(issue_date)=12 and year(issue_date)=2021;
```

	MTD_Total_Amount_Received
▶	58074380

PMTD Total Amount Received

```
SELECT
    SUM(total_payment) AS PMTD_Total_Amount_Received
FROM
    loan_data
where month(issue_date)=11 and year(issue_date)=2021;
```

	PMTD_Total_Amount_Received
▶	50132030

Average Interest Rate

```
select round(avg(int_rate*100),2) as Avg_Interest_Rate from loan_data ;
```

	Avg_Interest_Rate
▶	12.05

MTD Average Interest

```
select round(avg(int_rate*100),2) as MTD_Avg_Interest_Rate from loan_data
where month(issue_date)=12 and year(issue_date)=2021;
```

	MTD_Avg_Interest_Rate
▶	12.36

PMTD Average Interest

```
select round(avg(int_rate*100),2) as PMTD_Avg_Interest_Rate from loan_data
where month(issue_date)=11 and year(issue_date)=2021;
```

	PMTD_Avg_Interest_Rate
▶	11.94

Avg DTI

```
select round(avg(dti) *100,2) as Avg_DTI from loan_data;
```

	Avg_DTI
▶	13.33

MTD Avg DTI

```
select round(avg(dti) *100,2) as Avg_DTI from loan_data  
where month(issue_date)=12 and year(issue_date)=2021;
```

	Avg_DTI
▶	13.67

PMTD Avg DTI

```
select round(avg(dti) *100,2) as Avg_DTI from loan_data  
where month(issue_date)=11 and year(issue_date)=2021;
```

	Avg_DTI
▶	13.3

GOOD LOAN ISSUED

Good Loan Percentage

```
select (count(case when loan_status="Fully Paid" or loan_status="Current" then id end)*100)  
/count(id)as Good_Loan_Percentage  
from loan_data;
```

	Good_Loan_Percentage
▶	86.1753

Good Loan Applications

```
select count(id) as Good_Loan_Applications from loan_data  
where loan_status='Fully Paid' or loan_status='Current';
```

	Good_Loan_Applications
▶	33243

Good Loan Funded Amount

```
select sum(loan_amount) as Good_Loan_Funded_Amount from loan_data
where loan_status in ('Fully Paid','Current');
```

	Good_Loan_Funded_Amount
▶	370224850

Good Loan Amount Received

```
-- Good Loan Amount Received
select sum(total_payment) as Good_Loan_Amount_Received from loan_data
where loan_status in ('Fully paid','Current');
```

	Good_Loan_Amount_Received
▶	435786170

BAD LOAN ISSUED

Bad Loan Percentage

```
-- bad loan percentage
select (count(case when loan_status='Charged Off' then id end)*100) /count(id) as Bad_Loan_Percentage
from loan_data;
```

	Bad_Loan_Percentage
▶	13.8247

Bad Loan Applications

```
select count(id) as Bad_Loan_Applications from loan_data
where loan_status='Charged off';
```

	Bad_Loan_Applications
▶	5333

Bad Loan Funded Amount

```
select sum(loan_amount) as Bad_Loan_Funded_Amount from 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 loan_data
where loan_status='Charged off';
```

	Bad_loan_Amount_Received
▶	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,
round(Avg(int_rate)*100,2) as Interest_Rate ,
round(Avg(dti)*100,2) as DTI
from loan_data
group by loan_status;
```

	loan_status	Total_Loan_Applications	Total_Funded_Amount	Total_Received_Amount	Interest_Rate	DTI
▶	Fully Paid	32145	351358350	411586256	11.64	13.17
	Charged Off	5333	65532225	37284763	13.88	14
	Current	1098	18866500	24199914	15.1	14.72

MTD loan status (of latest december month)

```

select loan_status,
sum(loan_amount) as Total_Funded_Amount ,
sum(total_payment) as Total_Received_Amount
from loan_data
where Month(issue_date)=12
group by loan_status

```

	loan_status	Total_Funded_Amount	Total_Received_Amount
►	Fully Paid	41302025	47815851
	Charged Off	8732775	5324211
	Current	3946625	4934318

B. BANK LOAN REPORT | OVERVIEW

MONTH

```

select month(issue_date) as Month_Number,
monthname(issue_date) as Month_Name ,
count(id) as Total_Loan_Applications,
sum(loan_amount) as Total_Funded_Amount,
sum(total_payment) as Total_Received_Amount
from loan_data
group by Month_Number,Month_Name
order by Month_Number

```


	Month_Number	Month_Name	Total_Loan_Applications	Total_Funded_Amount	Total_Received_Amount
▶	1	January	2332	25031650	27578836
	2	February	2279	24647825	27717745
	3	March	2627	28875700	32264400
	4	April	2755	29800800	32495533
	5	May	2911	31738350	33750523
	6	June	3184	34161475	36164533
	7	July	3366	35813900	38827220
	8	August	3441	38149600	42682218
	9	September	3536	40907725	43983948
	10	October	3796	44893800	49399567

STATE

```
select address_state as state,
count(id) as Total_Loan_Applications,
sum(loan_amount) as Total_Loan_Amount,
sum(total_payment) as Total_Loan_Received
from loan_data
group by state
order by state;
```

	state	Total_Loan_Applications	Total_Loan_Amount	Total_Loan_Received
▶	AK	78	1031800	1108570
	AL	432	4949225	5492272
	AR	236	2529700	2777875
	AZ	833	9206000	10041986
	CA	6894	78484125	83901234

TERM

```
select term as Loan_Term,
count(id) as Total_Loan_Applications,
sum(loan_amount) as Total_Funded_Amount,
sum(total_payment) as Total_Amount_Received
from loan_data
group by Loan_Term
```


	Loan_Term	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
▶	36 months	28237	273041225	294709458
	60 months	10339	162715850	178361475

EMPLOYEE LENGTH

SELECT

```
emp_length AS Employee_Length,
COUNT(id) AS Total_Loan_Applications,
SUM(loan_amount) AS Total_Funded_Amount,
SUM(total_payment) AS Total_Amount_Received
```

FROM loan_data

GROUP BY emp_length

ORDER BY emp_length;

	Employee_Length	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
▶	< 1 year	4575	44210625	47545011
	1 year	3229	32883125	35498348
	10+ years	8870	116115950	125871616
	2 years	4382	44967975	49206961
	3 years	4088	43937850	47551832

PURPOSE

```
select purpose as Purpose,
count(id) as Total_Loan_Applications,
sum(loan_amount) as Total_Loan_Amount,
sum(total_payment) as Total_Loan_Received
from loan_data
group by Purpose
order by Purpose;
```

	Purpose	Total_Loan_Applicatons	Total_Loan_Amount	Total_Loan_Received
►	car	1497	10223575	11324914
	credit card	4998	58885175	65214084
	Debt consolidation	18214	232459675	253801871
	educational	315	2161650	2248380
	home improvement	2876	33350775	36380930

HOME OWNERSHIP

SELECT

```
home_ownership AS Home_Ownership,
COUNT(id) AS Total_Loan_Applications,
SUM(loan_amount) AS Total_Funded_Amount,
SUM(total_payment) AS Total_Amount_Received
```

FROM loan_data

	Home_Ownership	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
►	MORTGAGE	17198	219329150	238474438
	NONE	3	16800	19053
	OTHER	98	1044975	1025257
	OWN	2838	29597675	31729129
	RENT	18439	185768475	201823056

HOME OWNERSHIP Filter for Grade'A' And state='CA'

SELECT

```
home_ownership AS Home_Ownership,
COUNT(id) AS Total_Loan_Applications,
SUM(loan_amount) AS Total_Funded_Amount,
SUM(total_payment) AS Total_Amount_Received
```

FROM loan_data

WHERE Grade='A' and address_state='CA'

GROUP BY home_ownership

ORDER BY home_ownership;

	Home_Ownership	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
►	MORTGAGE	612	6276375	6490097
	OTHER	2	14000	15340
	OWN	93	802100	844556
	RENT	894	7359175	7680797