

BANK LOAN REPORT QUERY DOCUMENT

A. BANK LOAN REPORT | SUMMARY

KPI's

1. Total loan applications

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

	Total_loan_application
1	38576

MTD loan applications

```
SELECT COUNT(id) as MTD_total_loan_applications from bank_loan_data  
WHERE month(issue_date)=12
```

	MTD_total_loan_applications
1	4314

PMTD loan applications

```
SELECT COUNT(id) as PMTD_total_loan_applications from bank_loan_data  
WHERE month(issue_date)=11
```

	PMTD_total_loan_applications
1	4035

2. Total funded amount

```
SELECT SUM(loan_amount) as Total_funded_amount from bank_loan_data
```

	Total_funded_amount
1	435757075

Total MTD funded amount

```
SELECT SUM(loan_amount) as MTD_total_funded_amount from bank_loan_data  
where month(issue_date)=12 and YEAR(issue_date)=2021
```

	MTD_total_funded_amount
1	53981425

Total PMTD funded amount

```
SELECT SUM(loan_amount) as PMTD_total_funded_amount from bank_loan_data  
where month(issue_date)=11 and YEAR(issue_date)=2021
```

	PMTD_total_funded_amount
1	47754825

3. Total amount received

```
SELECT SUM(total_payment) as Total_amount_received from bank_loan_data
```

	Total_amount_received
1	473070933

MTD total amount received

```
SELECT SUM(total_payment) as MTD_total_amount_received from bank_loan_data
where month(issue_date)=12 AND year(issue_date)=2021
```

	MTD_total_amount_received
1	58074380

PMTD total amount received

```
SELECT SUM(total_payment) as PMTD_total_amount_received from bank_loan_data
where month(issue_date)=11 AND year(issue_date)=2021
```

	PMTD_total_amount_received
1	50132030

4. Average Interest rate

```
SELECT ROUND(AVG(int_rate),4) * 100 as Average_interest_rate from bank_loan_data
```

	Average_interest_rate
1	12.05

MTD_average_interest rate

```
SELECT ROUND(AVG(int_rate),4) * 100 as MTD_Average_interest_rate from bank_loan_data
WHERE Month(issue_date)=12 AND YEAR(issue_date)=2021
```

	MTD_Average_interest_rate
1	12.36

PMTD_Average interest rate

```
SELECT ROUND(AVG(int_rate),4) * 100 as PMTD_Average_interest_rate from bank_loan_data
WHERE Month(issue_date)=11 AND YEAR(issue_date)=2021
```

	PMTD_Average_interest_rate
1	11.94

5. Average debt to income ratio(DTI)

```
SELECT ROUND(AVG(DTI),4) * 100 as Avg_DTI from bank_loan_data
```

	Avg_DTI
1	13.33

MTD average debt to income ratio

```
SELECT ROUND(AVG(DTI),4) * 100 as MTD_Avg_DTI from bank_loan_data
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date)=2021
```

	MTD_Avg_DTI
1	13.67

PMTD average debt to income ratio

```
SELECT ROUND(AVG(DTI),4) * 100 as PMTD_Avg_DTI from bank_loan_data
WHERE MONTH(issue_date) = 11 AND YEAR(issue_date)=2021
```

	PMTD_Avg_DTI
1	13.3

KPI's SUMMARY FOR GOOD LOAN

1. Good Loan Application percentage

```
SELECT (COUNT(CASE WHEN loan_status='Fully Paid' or loan_status='Current' THEN id END)
*100)
/
COUNT(id) as Good_loan_Percentage
FROM bank_loan_data
```

	Good_loan_Percentage
1	86

2. Good loan applications

```
SELECT COUNT(id) as Good_loan_applications from bank_loan_data
where loan_status = 'Fully Paid' or loan_status='Current'
```

	Good_loan_applications
1	33243

3. Good loan funded amount

```
SELECT SUM(loan_amount) as Good_loan_funded_amount from bank_loan_data
WHERE loan_status = 'Fully Paid' or loan_status='Current'
```

	Good_loan_funded_amount
1	370224850

4. Good loan total received amount

```
SELECT SUM(total_payment) as Good_loan_received_amount from bank_loan_data
WHERE loan_status = 'Fully Paid' or loan_status='Current'
```

	Good_loan_received_amount
1	435786170

KPI's SUMMARY FOR BAD LOAN

1. Bad Loan Application percentage

```
SELECT (COUNT(CASE WHEN loan_status = 'Charged Off' THEN id END )*100.0)
/
COUNT(ID) as bad_loan_percentage
FROM bank_loan_data
```

	bad_loan_percentage
1	13.824657818332

2. Bad loan applications

```
SELECT COUNT(ID) as bad_loan_applications from bank_loan_data
where loan_status = 'Charged Off'
```

	bad_loan_applications
1	5333

3. Bad loan funded amount

```
SELECT SUM(loan_amount) as Bad_funded_amount from bank_loan_data
where loan_status= 'Charged Off'
```

	Bad_funded_amount
1	65532225

4. Bad loan total received amount

```
SELECT SUM(total_payment) as Bad_funded_amount_received from bank_loan_data
where loan_status= 'Charged Off'
```

	Bad_funded_amount_received
1	37284763

.....

1. Loan status

```
SELECT
loan_status,
COUNT(id) as toal_loan_applications,
SUM(loan_amount) as Total_amount_funded,
SUM(total_payment) as Total_amount_received,
ROUND(AVG(int_rate),4)*100 as Interest_rate,
ROUND(AVG(dti),4)*100 as DTI_percentage
FROM bank_loan_data
GROUP BY loan_status
```

	loan_status	toal_loan_applications	Total_amount_funded	Total_amount_received	Interest_rate	DTI_percentage
1	Fully Paid	32145	351358350	411586256	11.64	13.17
2	Charged Off	5333	65532225	37284763	13.88	14
3	Current	1098	18866500	24199914	15.1	14.72

2. Loan status month to date

```
loan_status,  
SUM(loan_amount) as MTD_Total_amount_funded,  
SUM(total_payment) as MTD_Total_amount_received  
FROM bank_loan_data  
where MONTH(issue_date)=12  
GROUP BY loan_status
```

	loan_status	MTD_Total_amount_funded	MTD_Total_amount_received
1	Fully Paid	41302025	47815851
2	Charged Off	8732775	5324211
3	Current	3946625	4934318

.....

B. OVERVEIW DASHBOARD| SUMMARY

1. Monthly trend for total applications, total amount funded and total amount received by issue date

```
SELECT  
MONTH(issue_date) as Month_number,  
DATENAME(MONTH,issue_date) as Month_name,  
COUNT(id) as Total_loan_application,  
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_number	Month_name	Total_loan_application	Total_funded_amount	Total_amount_received
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
11	November	4035	47754825	50132030
12	December	4314	53981425	58074380

2. Regional analysis by State:

```
SELECT  
address_state as address_date,  
COUNT(id) as Total_loan_application,  
SUM(loan_amount) as Total_funded_amount,  
SUM(total_payment) as Total_amount_received  
FROM bank_loan_data  
GROUP BY address_state  
ORDER BY COUNT(id) DESC
```

	address_date	Total_loan_application	Total_funded_amount	Total_amount_received
	CA	6894	78484125	83901234
	NY	3701	42077050	46108181
	FL	2773	30046125	31601905
	TX	2664	31236650	34392715
	NJ	1822	21657475	23425159
	IL	1486	17124225	18875941
	PA	1482	15826525	17462908
	VA	1375	15982650	17711443
	GA	1355	15480325	16728040
0	MA	1310	15051000	16676279
1	OH	1188	12991375	14330148
2	MD	1027	11911400	12985170
3	AZ	833	9206000	10041986
4	WA	805	8855525	9531739
5	CO	770	8976000	9845810
6	NC	759	8787575	9534813

3. Loan term analysis

```
SELECT
term as TERM ,
COUNT(id) as Total_loan_application,
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_application	Total_funded_amount	Total_amount_received
1	36 months	28237	273041225	294709458
2	60 months	10339	162715850	178361475

4. Employee length analysis

```
SELECT
emp_length ,
COUNT(id) as Total_loan_application,
SUM(loan_amount) as Total_funded_amount,
SUM(total_payment) as Total_amount_received
FROM bank_loan_data
GROUP BY emp_length
ORDER BY emp_length
```

	emp_length	Total_loan_application	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

5. Purpose analysis

```
SELECT
purpose ,
COUNT(id) as Total_loan_application,
SUM(loan_amount) as Total_funded_amount,
SUM(total_payment) as Total_amount_received
FROM bank_loan_data
GROUP BY purpose
ORDER BY COUNT(id) DESC
```

purpose	Total_loan_application	Total_funded_amount	Total_amount_received
Debt consolidation	18214	232459675	253801871
credit card	4998	58885175	65214084
other	3824	31155750	33289676
home improvement	2876	33350775	36380930
major purchase	2110	17251600	18676927
small business	1776	24123100	23814817
car	1497	10223575	11324914
wedding	928	9225800	10266856
medical	667	5533225	5851372
moving	559	3748125	3999899
house	366	4824925	5185538
vacation	352	1967950	2116738
educational	315	2161650	2248380
renewable_energy	94	845750	898931

6. Home ownership analysis

```

SELECT
home_ownership ,
COUNT(id) as Total_loan_application,
SUM(loan_amount) as Total_funded_amount,
SUM(total_payment) as Total_amount_received
FROM bank_loan_data
GROUP BY home_ownership
ORDER BY COUNT(id) DESC

```

	home_ownership	Total_loan_application	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