Bank Loan Analysis

KPI's

Total Loan Application

select count(id) as Total_loan_applications from Bank_Loan_Data

	Total_loan_applications
1	38576

MTD_TOTAL_LOAN_APPLICATION

select count(id) as MTD_Total_loan_applications from Bank_Loan_Data
where MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021

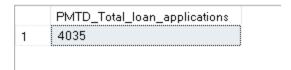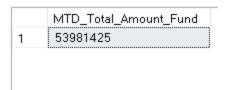|	MTD_Total_loan_applications
1	4314

PMTD_TOTAL_LOAN_APPLICATION

select count(id) as PMTD_Total_loan_applications from Bank_Loan_Data
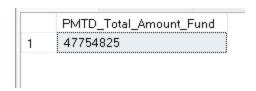where MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021

	PMTD_Total_loan_applications
1	4035

MTD_TOTAL_LOAN_Amount

select sum(loan_amount) as MTD_Total_Amount_Fund from Bank_Loan_Data
where MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021

	MTD_Total_Amount_Fund
1	53981425

PMTD_TOTAL_LOAN_Amount

select sum(loan_amount) as PMTD_Total_Amount_Fund from Bank_Loan_Data
where MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021

	PMTD_Total_Amount_Fund
1	47754825

MTD_TOTAL_Payment_Amount

select sum(total_payment) as Total_Payment from Bank_Loan_Data
where MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021

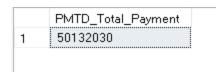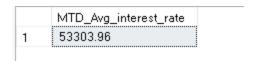|	Total_Payment
1	50132030

PMTD_TOTAL_Payment_Amount

select sum(total_payment) as PMTD_Total_Payment from Bank_Loan_Data
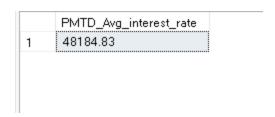where MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021

	PMTD_Total_Payment
1	50132030

MTD_Avg_Interest_rate

select round(sum(int_rate),4)*100 as MTD_Avg_interest_rate from Bank_Loan_Data
where MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021

	MTD_Avg_interest_rate
1	53303.96

PMTD_Avg_Interest_rate

select round(sum(int_rate),4)*100 as PMTD_Avg_interest_rate from
Bank_Loan_Data
where MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021

	PMTD_Avg_interest_rate
1	48184.83

MTD_Avg_DTI

select round(sum(dti),4)*100 as MTD_Avg_DTI from Bank_Loan_Data
where MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021

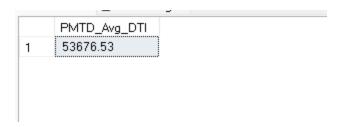|	MTD_Avg_DTI
1	58953.13

PMTD_Avg_DTI

select round(sum(dti),4)*100 as PMTD_Avg_DTI from Bank_Loan_Data
where MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021

	PMTD_Avg_DTI
1	53676.53

Good_Load_Status

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

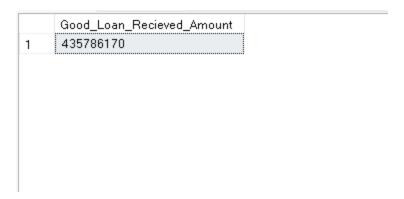|	Good_loan_Percentage
1	86

Good_Loan_Application

select count(id) as Good_Loan_Application from Bank_Loan_Data
where loan_status = 'Fully Paid' OR loan_status = 'Current'

	Good_Loan_Application
1	33243

Good_Loan_Recieved_Amount

select sum(total_payment) as Good_Loan_Recieved_Amount from Bank_Loan_Data
where loan_status = 'Fully Paid' OR loan_status = 'Current'

	Good_Loan_Recieved_Amount
1	435786170

Bad_loan_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

Bad_Loan_Application

select count(id) as Bad_Loan_Application from Bank_Loan_Data where loan_status = 'Charged Off'

	Bad_Loan_Application
1	5333

Bad_Loan_Recieved_Amount

select sum(total_payment) as Bad_Loan_Recieved_Amount from Bank_Loan_Data where loan_status = 'Charged Off'

	Bad_Loan_Recieved_Amount
1	37284763

Total_Loan_Application_By_Loan_status

select loan_status,count(id) as Total_Loan_Application,
sum(total_payment) as Total_Amount_Recieved,
sum(loan_amount) as Total_Funded_Amount,
AVG(int_rate * 100) as interest_Rate,
AVG(dti *100) as DTI
from Bank_Loan_Data
group by loan_status

	loan_status	Total_Loan_Application	Total_Amount_Recieved	Total_Funded_Amount	interest_Rate	DTI
1	Fully Paid	32145	411586256	351358350	11.6410707918092	13.1673507557434
2	Charged Off	5333	37284763	65532225	13.8785749318289	14.0047328005517
3	Current	1098	24199914	18866500	15.0993260800947	14.7243442736843

MTD__Total_Amount_ReceivedBy_Loan_status

select loan_status,sum(total_payment) as
MTD__Total_Amount_Received,sum(loan_amount) as MTD_Total_Fund_Amount
from Bank_Loan_Data
where MONTH(issue_date) = 12
group by loan_status

	loan_status	MTD__Total_Amount_Received	MTD_Total_Fund_Amount
1	Fully Paid	47815851	41302025
2	Charged Off	5324211	8732775
3	Current	4934318	3946625

MONTH_LOAN

select MONTH(issue_date) as Month_Number,
DATENAME(MONTH, issue_date) as Month_Name,
Count(id) as Total_Loan_Applications,
sum(Loan_amount) as Total_Funded_amount,
sum(total_payment) as Total_Recieved_Amount

from Bank_Loan_Data
group by MONTH(issue_date),DATENAME(MONTH, issue_date)
order by MONTH(issue_date)

	Month_Number	Month_Name	Total_Loan_Applications	Total_Funded_amount	Total_Recieved_Amount
1	1	January	2332	25031650	27578836
2	2	February	2279	24647825	27717745
3	3	March	2627	28875700	32264400
4	4	April	2755	29800800	32495533
5	5	May	2911	31738350	33750523
6	6	June	3184	34161475	36164533
7	7	July	3366	35813900	38827220
8	8	August	3441	38149600	42682218
9	9	September	3536	40907725	43983948
10	10	October	3796	44893800	49399567
11	11	November	4035	47754825	50132030
12	12	December	4314	53981425	58074380

ADRESS_STATE

select address_state,
Count(id) as Total_Loan_Applications,
sum(Loan_amount) as Total_Funded_amount,
sum(total_payment) as Total_Recieved_Amount
from Bank_Loan_Data
group by address_state
order by address_state

	address_state	Total_Loan_Applications	Total_Funded_amount	Total_Recieved_Amount
1	AK	78	1031800	1108570
2	AL	432	4949225	5492272
3	AR	236	2529700	2777875
4	AZ	833	9206000	10041986
5	CA	6894	78484125	83901234
6	CO	770	8976000	9845810
7	CT	730	8435575	9357612
8	DC	214	2652350	2921854
9	DE	110	1138100	1269136
10	FL	2773	30046125	31601905
11	GA	1355	15480325	16728040
12	HI	170	1850525	2080184
13	IA	5	56450	64482
14	ID	6	59750	65329
15	IL	1486	17124225	18875941
16	IN	9	86225	85521
17	KS	260	2872325	3247394

TERM

select term,
Count(id) as Total_Loan_Applications,
sum(Loan_amount) as Total_Funded_amount,
sum(total_payment) as Total_Recieved_Amount
from Bank_Loan_Data
group by term
order by term

	term	Total_Loan_Applications	Total_Funded_amount	Total_Recieved_Amount
1	36 months	28237	273041225	294709458
2	60 months	10339	162715850	178361475

EMP_LENGTH

select emp_length,
Count(id) as Total_Loan_Applications,
sum(Loan_amount) as Total_Funded_amount,

sum(total_payment) as Total_Recieved_Amount
from Bank_Loan_Data
group by emp_length
order by emp_length

	emp_length	Total_Loan_Applications	Total_Funded_amount	Total_Recieved_Amount
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

Purpose

select purpose,
Count(id) as Total_Loan_Applications,
sum(Loan_amount) as Total_Funded_amount,
sum(total_payment) as Total_Recieved_Amount
from Bank_Loan_Data
group by purpose
order by purpose

	purpose	Total_Loan_Applications	Total_Funded_amount	Total_Recieved_Amount
1	car	1497	10223575	11324914
2	credit card	4998	58885175	65214084
3	Debt consolidation	18214	232459675	253801871
4	educational	315	2161650	2248380
5	home improvement	2876	33350775	36380930
6	house	366	4824925	5185538
7	major purchase	2110	17251600	18676927
8	medical	667	5533225	5851372
9	moving	559	3748125	3999899
10	other	3824	31155750	33289676
11	renewable_energy	94	845750	898931
12	small business	1776	24123100	23814817
13	vacation	352	1967950	2116738
14	wedding	928	9225800	10266856

HOME_OWNER

select home_ownership,
Count(id) as Total_Loan_Applications,
sum(Loan_amount) as Total_Funded_amount,
sum(total_payment) as Total_Recieved_Amount
from Bank_Loan_Data
group by home_ownership
order by home_ownership

	home_ownership	Total_Loan_Applications	Total_Funded_amount	Total_Recieved_Amount
1	MORTGAGE	17198	219329150	238474438
2	NONE	3	16800	19053
3	OTHER	98	1044975	1025257
4	OWN	2838	29597675	31729129
5	RENT	18439	185768475	201823056