

Bank Loan Report Query Document

I – Bank Loan Report | Summary

KPI's

Total Loan Applications

SELECT COUNT(id) AS Total_Loan_Application FROM bank_loan_data

Results	
Messages	
Total_Loan_Application	
1	38576

MTD Loan Applications

SELECT COUNT(id) AS MTD_Total_Loan_Application FROM bank_loan_data
WHERE MONTH(issue_date)=12 AND YEAR(issue_date)=2021

MTD_Total_Loan_Application	
1	4314

PMTD Loan Application

SELECT COUNT(id) AS PMTD_Total_Loan_Application FROM bank_loan_data
WHERE MONTH(issue_date)=11 AND YEAR(issue_date)=2021

PMTD_Total_Loan_Application	
1	4035

Total Funded Amount

SELECT SUM(loan_amount) AS Total_Funded_Amount FROM bank_loan_data

Total_Funded_Amount	
1	435757075

MTD Total 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

PMTD Total 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

Total Amount Recieved

```
SELECT SUM(total_payment) AS Total_Amount_Recieved FROM bank_loan_data
```

	Total_Amount_Recieved
1	473070933

MTD Total Amount Recieved

```
SELECT SUM(total_payment) AS MTD_Total_Amount_Recieved FROM bank_loan_data  
WHERE MONTH(issue_date)=12 AND YEAR(issue_date)=2021
```

	MTD_Total_Amount_Recieved
1	58074380

PMTD Total Amount Recieved

```
SELECT SUM(total_payment) AS PMTD_Total_Amount_Recieved FROM bank_loan_data  
WHERE MONTH(issue_date)=11 AND YEAR(issue_date)=2021
```

	PMTD_Total_Amount_Recieved
1	50132030

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

Average DTI

```
SELECT ROUND(AVG(dti),4)*100 AS Average_DTI FROM bank_loan_data
```

	Average_DTI
1	13.33

MTD Average DTI

```
SELECT ROUND(AVG(dti),4)*100 AS MTD_Average_DTI FROM bank_loan_data  
WHERE MONTH(issue_date)=12 AND YEAR(issue_date)=2021
```

	MTD_Average_DTI
1	13.67

PMTD Average DTI

```
SELECT ROUND(AVG(dti),4)*100 AS PMTD_Average_DTI FROM bank_loan_data  
WHERE MONTH(issue_date)=11 AND YEAR(issue_date)=2021
```

	PMTD_Average_DTI
1	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 bank_loan_data
```

	Good_loan_Percentage
1	86

Good Loan Application

```
SELECT (COUNT(CASE WHEN loan_status='Fully Paid' OR loan_status= 'Current' THEN id  
END)) AS Good_loan_Applications FROM bank_loan_data
```

	Good_loan_Applications
1	33243

Good Loan Amount Funded

```
SELECT SUM(loan_amount) As Good_loan_Amount_Funded FROM bank_loan_data  
WHERE loan_status='Fully Paid' OR loan_status= 'Current'
```

	Good_loan_Amount_Funded
1	370224850

Good Loan Amount Recieved

```
SELECT SUM(total_payment) As Good_loan_Amount_Recieved FROM bank_loan_data  
WHERE loan_status='Fully Paid' OR loan_status= 'Current'
```

	Good_loan_Amount_Recieved
1	435786170

Bad Loan Issued

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 Applications

```
SELECT COUNT(id) AS Bad_Loan_Applications FROM bank_loan_data
WHERE loan_status = 'Charged Off'
```

	Bad_Loan_Applications
1	5333

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
1	65532225

Bad Loan Amount Recieved

```
SELECT SUM(total_payment) AS Bad_Loan_Recieved_Amount FROM bank_loan_data
WHERE loan_status = 'Charged Off'
```

	Bad_Loan_Recieved_Amount
1	37284763

Loan Status

```
SELECT
    loan_status,
    COUNT(id) AS Total_Loan_Applications,
    SUM(total_payment) AS Total_Amount_Received,
    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_Applications	Total_Amount_Received	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

```

SELECT
    loan_status,
    SUM(total_payment) AS MTD_Total_Amount_Received,
    SUM(loan_amount) AS MTD_Total_Funded_Amount
FROM bank_loan_data
WHERE MONTH(issue_date) = 12
GROUP BY loan_status

```

	loan_status	MTD_Total_Amount_Received	MTD_Total_Funded_Amount
1	Fully Paid	47815851	41302025
2	Charged Off	5324211	8732775
3	Current	4934318	3946625

II - Bank Loan Report | Overview

Month

```
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_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_Applications	Total_Funded_Amount	Total_Amount_Received
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

State

```
SELECT
    address_state AS 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 Address_State
ORDER BY COUNT(id) DESC
```

1.	CA	6894	78484125	83901234
2.	NY	3701	42077050	46108181
3.	FL	2773	30046125	31601905
4.	TX	2664	31236650	34392715

5. NJ	1822	21657475	23425159
6. IL	1486	17124225	18875941
7. PA	1482	15826525	17462908
8. VA	1375	15982650	17711443
9. GA	1355	15480325	16728040
10. MA	1310	15051000	16676279
11. OH	1188	12991375	14330148
12. MD	1027	11911400	12985170
13. AZ	833	9206000	10041986
14. WA	805	8855525	9531739
15. CO	770	8976000	9845810
16. NC	759	8787575	9534813
17. CT	730	8435575	9357612
18. MI	685	7829900	8543660
19. MO	660	7151175	7692732
20. MN	592	6302600	6750746
21. NV	482	5307375	5451443
22. SC	464	5080475	5462458
23. WI	446	5070450	5485161
24. OR	436	4720150	4966903
25. AL	432	4949225	5492272
26. LA	426	4498900	5001160
27. KY	320	3504100	3792530
28. OK	293	3365725	3712649
29. KS	260	2872325	3247394
30. UT	252	2849225	2952412
31. AR	236	2529700	2777875
32. DC	214	2652350	2921854
33. RI	196	1883025	2001774
34. NM	183	1916775	2084485
35. HI	170	1850525	2080184
36. WV	167	1830525	1991936
37. NH	161	1917900	2101386
38. DE	110	1138100	1269136
39. WY	79	890750	1046050
40. MT	79	829525	892047
41. AK	78	1031800	1108570
42. SD	63	606150	656514
43. VT	54	504100	534973
44. MS	19	139125	149342
45. TN	17	162175	141522
46. IN	9	86225	85521
47. ID	6	59750	65329
48. NE	5	31700	24542
49. IA	5	56450	64482
50. ME	3	9200	10808

Term

```
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 term
ORDER BY term
```

	term	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
1	36 months	28237	273041225	294709458
2	60 months	10339	162715850	178361475

Employee Length

```
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 emp_length
ORDER BY emp_length
```

	emp_length	Total_Loan_Applications	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

Purpose

```
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 purpose
ORDER BY COUNT(id) DESC
```

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

Home Ownership

```
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 home_ownership
ORDER BY COUNT(id) DESC
```

	home_ownership	Total_Loan_Applications	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

Note: We have applied multiple Filters on all the dashboards. You can check the results for the filters as well by modifying the query and comparing the results.

For e.g

See the results when we hit the Grade A in the filters for dashboards

```
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
WHERE grade='A' AND address_state='CA'
GROUP BY home_ownership
ORDER BY COUNT(id) DESC
```

	home_ownership	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
1	RENT	894	7359175	7680797
2	MORTGAGE	612	6276375	6490097
3	OWN	93	802100	844556
4	OTHER	2	14000	15340