BANK LOAN REPORT QUERY DOCUMENT

A. BANK LOAN REPORT | SUMMARY

KPI's:

Total Loan Applications

```sql
select count(id) as total_loan_applications from bank_loan_data;
```

123 total_loan_applications ▼
38,576

MTD Loan Applications

```sql
select count(id) as mtd_total_loan_applications from
bank_loan_data
where month(issue_date)=12 ;
```

123 mtd_total_loan_applications ▼
4,314

PMTD Loan Applications

```sql
select count(id) as pmtd_total_loan_applications from
bank_loan_data
where month(issue_date)=11;
```

123 pmtd_total_loan_applications ▼
4,035

MoM

```sql
SELECT
    ROUND(
        (
            (SELECT COUNT(id) FROM bank_loan_data
             WHERE MONTH(issue_date) = 12)
          _
            (SELECT COUNT(id) FROM bank_loan_data
             WHERE MONTH(issue_date) = 11)
        )
        / (SELECT COUNT(id) FROM bank_loan_data
            WHERE MONTH(issue_date) = 11) * 100, 1
    ) AS Month_over_month;
```

123 Month_over_month ▼
6.9

Total Funded Amount

```sql
select sum(loan_amount) as total_funded_amount from bank_loan_data;
```

123 total_funded_amount ▼
435,757,075

MTD Total Funded Amount

```sql
select sum(loan_amount) as mtd_total_funded_amount from bank_loan_data
where month(issue_date) = (select max(month(issue_date)) from bank_loan_data);
```

123 mtd_total_funded_amount ▼
53,981,425

PMTD Total Funded Amount

```sql
select sum(loan_amount) as pmtd_total_funded_amount from bank_loan_data
where month(issue_date) = (select max(month(issue_date)-1)
from bank_loan_data);
```

123 pmtd_total_funded_amount ▼
47,754,825

MoM

```sql
SELECT
    ROUND(
        (
            (SELECT SUM(loan_amount)
             FROM bank_loan_data
             WHERE MONTH(issue_date) = (SELECT
MAX(MONTH(issue_date)) FROM bank_loan_data))
            –
            (SELECT SUM(loan_amount)
             FROM bank_loan_data
             WHERE MONTH(issue_date) = (SELECT
MAX(MONTH(issue_date)) – 1 FROM bank_loan_data)))
            /
        (SELECT SUM(loan_amount)
         FROM bank_loan_data
         WHERE MONTH(issue_date) = (SELECT
MAX(MONTH(issue_date)) – 1 FROM bank_loan_data)) * 100, 1
    ) AS Month_over_month;
```

123 Month_over_month ▼
13

Total Amount Received

```sql
select sum(total_payment) as total_amount_received from
bank_loan_data;
```

123 total_amount_received ▼
473,070,933

MTD Total Amount Received

```sql
select sum(total_payment) as mtd_total_amount_received from
bank_loan_data
where month(issue_date) = (select max(month(issue_date)) from
bank_loan_data);
```

123 mtd_total_amount_received ▼
58,074,380

PMTD Total Amount Received

```sql
select sum(total_payment) as pmtd_total_amount_received  from
bank_loan_data
where month(issue_date) = (select max(month(issue_date)-1)
from bank_loan_data);
```

123 pmtd_total_amount_received ▼
50,132,030

MoM

```sql
SELECT
    ROUND(
        ( (SELECT SUM(total_payment)
            FROM bank_loan_data
            WHERE MONTH(issue_date) = (SELECT
MAX(MONTH(issue_date)) FROM bank_loan_data))
            –
            (SELECT SUM(total_payment)
            FROM bank_loan_data
            WHERE MONTH(issue_date) = (SELECT
MAX(MONTH(issue_date)) – 1 FROM bank_loan_data)))
        /  (SELECT SUM(total_payment)
        FROM bank_loan_data
        WHERE MONTH(issue_date) = (SELECT
MAX(MONTH(issue_date)) – 1 FROM bank_loan_data)) * 100, 1
    ) AS Month_over_month;
```

123 Month_over_month ▼
15.8

Average Interest Rate

```sql
select AVG(int_rate)* 100 as average_interest_rate from
bank_loan_data;
```

123 average_interest_rate ▼
12.0488314172

MTD Average Interest

```sql
select AVG(int_rate)* 100 as mtd_average_interest_rate from
bank_loan_data
where month(issue_date) = (select max(month(issue_date)) from
bank_loan_data);
```

123 mtd_average_interest_rate ▼
12.3560408676

PMTD Average Interest

```sql
select AVG(int_rate)* 100 as Pmtd_average_interest_rate from
bank_loan_data
where month(issue_date) = (select max(month(issue_date)-1)
from bank_loan_data);
```

123 Pmtd_average_interest_rate ▼
11.9417175498

MoM

```sql
SELECT
    ROUND(
        (
            (select AVG(int_rate)* 100 from bank_loan_data
where month(issue_date) = (select max(month(issue_date)) from
bank_loan_data))
            _
            (select AVG(int_rate)* 100 from bank_loan_data
where month(issue_date) = (select max(month(issue_date)-1)
from bank_loan_data)))
        /
        (select AVG(int_rate)* 100 from bank_loan_data
where month(issue_date) = (select max(month(issue_date)-1)
from bank_loan_data)) * 100, 1
    ) AS Month_over_month;
```

123 Month_over_month ▼
3.5

Avg DTI

```sql
SELECT AVG(dti)*100 AS Avg_DTI FROM bank_loan_data;
```

123 Avg_DTI ▼
13.3274331211

MTD Avg DTI

```sql
SELECT AVG(dti)*100 AS MTD_Avg_DTI FROM bank_loan_data
WHERE MONTH(issue_date) = 12;
```

123 MTD_Avg_DTI ▼
13.665537788

PMTD Avg DTI

```sql
SELECT AVG(dti)*100 AS PMTD_Avg_DTI FROM bank_loan_data
WHERE MONTH(issue_date) = 11;
```

123 PMTD_Avg_DTI ▼
13.3027335836

MoM

```sql
SELECT
    ROUND(
        (
            (select AVG(dti)* 100 from bank_loan_data
where month(issue_date) = (select max(month(issue_date)) from
bank_loan_data))
            -
            (select AVG(dti)* 100 from bank_loan_data
where month(issue_date) = (select max(month(issue_date)-1)
from bank_loan_data)))
        /
        (select AVG(dti)* 100 from bank_loan_data
where month(issue_date) = (select max(month(issue_date)-1)
from bank_loan_data))
        * 100, 1
    ) AS Month_over_month;
```

123 Month_over_month ▼
2.7

GOOD LOAN ISSUED

Good Loan Percentage

```sql
SELECT
    (COUNT(CASE WHEN loan_status = 'Fully Paid' OR loan_status
= 'Current' THEN id END) * 100.0) /
    COUNT(id) AS Good_Loan_Percentage
FROM bank_loan_data;
```

123 Good_Loan_Percentage ▼
86.17534

Good Loan Applications

```sql
SELECT COUNT(id) AS Good_Loan_Count
FROM bank_loan_data
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current';
```

123 Good_Loan_Count ▼
33,243

Good Loan Funded Amount

```sql
SELECT SUM(loan_amount) AS Good_Loan_Funded_amount FROM
bank_loan_data
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current';
```

123 Good_Loan_Funded_amount ▼
370,224,850

Good Loan Amount Received

```sql
SELECT SUM(total_payment) AS Good_Loan_amount_received FROM
bank_loan_data
WHERE loan_status = 'Fully Paid' OR loan_status = 'Current';
```

123 Good_Loan_amount_received ▼
435,786,170

BAD LOAN ISSUED

Bad Loan Percentage

```sql
SELECT
    (COUNT(CASE WHEN loan_status = 'Charged Off' THEN id END)
* 100.0) /
    COUNT(id) AS Bad_Loan_Percentage
FROM bank_loan_data;
```

123 Bad_Loan_Percentage ▼
13.82466

Bad Loan Applications

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

123 Bad_Loan_Applications ▼
5,333

Bad Loan Funded Amount

```sql
SELECT SUM(loan_amount) AS Bad_Loan_Funded_amount FROM
bank_loan_data
WHERE loan_status = 'Charged Off';
```

123 Bad_Loan_Funded_amount ▼
65,532,225

Bad Loan Amount Received

```sql
SELECT SUM(total_payment) AS Bad_Loan_amount_received FROM
bank_loan_data
WHERE loan_status = 'Charged Off';
```

123 Bad_Loan_amount_received ▼
37,284,763

LOAN STATUS

```sql
SELECT
        loan_status,
        COUNT(id) AS Total_Loan_Applications,
        SUM(total_payment) AS Total_Amount_Received,
        SUM(loan_amount) AS Total_Funded_Amount,
        round(AVG(int_rate * 100),1) AS Interest_Rate,
        round(AVG(dti * 100),1) AS DTI
    FROM
        bank_loan_data
    GROUP BY
        loan_status;
```

A-Z loan_status ▼	123 Total_Loan_Applications ▼	123 Total_Amount_Received ▼	123 Total_Funded_Amount ▼	123 Interest_Rate ▼	123 DTI ▼
Fully Paid	32,145	411,586,256	351,358,350	11.6	13.2
Charged Off	5,333	37,284,763	65,532,225	13.9	14
Current	1,098	24,199,914	18,866,500	15.1	14.7

```sql
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;
```

A-Z loan_status ▼	123 MTD_Total_Amount_Received ▼	123 MTD_Total_Funded_Amount ▼
Fully Paid	47,815,851	41,302,025
Charged Off	5,324,211	8,732,775
Current	4,934,318	3,946,625

B.BANK LOAN REPORT | OVERVIEW

MONTH

```
SELECT
    MONTH(issue_date) AS Month_Munber,
    MONTHNAME(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), MONTHNAME(ISSUE_DATE)
ORDER BY MONTH(issue_date);
```

123 Month_Munber	A-Z Month_name	123 Total_Loan_Applications	123 Total_Funded_Amount	123 Total_Amount_Received
1	January	2,332	25,031,650	27,578,836
2	February	2,279	24,647,825	27,717,745
3	March	2,627	28,875,700	32,264,400
4	April	2,755	29,800,800	32,495,533
5	May	2,911	31,738,350	33,750,523
6	June	3,184	34,161,475	36,164,533
7	July	3,366	35,813,900	38,827,220
8	August	3,441	38,149,600	42,682,218
9	September	3,536	40,907,725	43,983,948
10	October	3,796	44,893,800	49,399,567
11	November	4,035	47,754,825	50,132,030
12	December	4,314	53,981,425	58,074,380

STATE

```
SELECT
    address_state AS 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 address_state;
```

A-Z State	123 Total_Loan_Applications	123 Total_Funded_Amount	123 Total_Amount_Received
AK	78	1,031,800	1,108,570
AL	432	4,949,225	5,492,272
AR	236	2,529,700	2,777,875
AZ	833	9,206,000	10,041,986
CA	6,894	78,484,125	83,901,234
CO	770	8,976,000	9,845,810
CT	730	8,435,575	9,357,612
DC	214	2,652,350	2,921,854
DE	110	1,138,100	1,269,136
FL	2,773	30,046,125	31,601,905
GA	1,355	15,480,325	16,728,040
HI	170	1,850,525	2,080,184
IA	5	56,450	64,482
ID	6	59,750	65,329
IL	1,486	17,124,225	18,875,941
IN	9	86,225	85,521

TERM

```sql
SELECT
    term AS 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;
```

A-Z Term	123 Total_Loan_Applications	123 Total_Funded_Amount	123 Total_Amount_Received
36 months	28,237	273,041,225	294,709,458
60 months	10,339	162,715,850	178,361,475

EMPLOYEE LENGTH

```sql
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 bank_loan_data
GROUP BY emp_length
ORDER BY emp_length;
```

A-Z Employee_Length	123 Total_Loan_Applications	123 Total_Funded_Amount	123 Total_Amount_Received
< 1 year	4,575	44,210,625	47,545,011
1 year	3,229	32,883,125	35,498,348
10+ years	8,870	116,115,950	125,871,616
2 years	4,382	44,967,975	49,206,961
3 years	4,088	43,937,850	47,551,832
4 years	3,428	37,600,375	40,964,850
5 years	3,273	36,973,625	40,397,571
6 years	2,228	25,612,650	27,908,658
7 years	1,772	20,811,725	22,584,136
8 years	1,476	17,558,950	19,025,777
9 years	1,255	15,084,225	16,516,173

PURPOSE

```sql
SELECT
    purpose AS 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 purpose;
```

PURPOSE	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
car	1,497	10,223,575	11,324,914
credit card	4,998	58,885,175	65,214,084
Debt consolidation	18,214	232,459,675	253,801,871
educational	315	2,161,650	2,248,380
home improvement	2,876	33,350,775	36,380,930
house	366	4,824,925	5,185,538
major purchase	2,110	17,251,600	18,676,927
medical	667	5,533,225	5,851,372
moving	559	3,748,125	3,999,899
other	3,824	31,155,750	33,289,676
renewable_energy	94	845,750	898,931
small business	1,776	24,123,100	23,814,817
vacation	352	1,967,950	2,116,738
wedding	928	9,225,800	10,266,856

HOME OWNERSHIP

```sql
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 bank_loan_data
GROUP BY home_ownership
ORDER BY home_ownership;
```

Home_Ownership	Total_Loan_Applications	Total_Funded_Amount	Total_Amount_Received
MORTGAGE	17,198	219,329,150	238,474,438
NONE	3	16,800	19,053
OTHER	98	1,044,975	1,025,257
OWN	2,838	29,597,675	31,729,129
RENT	18,439	185,768,475	201,823,056