

BANK LOAN REPORT QUERY DOCUMENT

A: BANK LOAN REPORT | SUMMARY

KPI's:

Total Loan Applications:

`SELECT count(id) 'Total Applications' from bankloan;`

	Total Applications
▶	38576

MTD Loan Applications:

`select count(id) 'MTD Total Applications' from bankloan where month(issue_date) = 12 and year(issue_date) = 2021;`

	MTD Total Applications
▶	4314

PMTD Loan Applications

`select count(id) 'PMTD Total Applications' from bankloan where month(issue_date) = 11 and year(issue_date) = 2021;`

	PMTD Total Applications
▶	4035

MoM Loan Applications:

```
SELECT ((select COUNT(id)
from bankloan
where month(issue_date) = 12 AND year(issue_date) = 2021) -
(select COUNT(id) from bankloan
where month(issue_date) = 11 AND year(issue_date) = 2021)) /
NULLIF(
(select COUNT(id) from bankloan
where month(issue_date) = 11 AND year(issue_date) = 2021), 0) * 100
AS 'MOM Total Applications Change (%)';
```

	MOM Total Applications Change (%)
▶	6.9145

Total Funded Amount:

```
select concat(format(sum(loan_amount)/1000000,2), ' M') 'Total Funded Amount' from bankloan;
```

	Total Funded Amount
▶	435.76 M

MTD Total Funded Amount:

```
select concat(format(sum(loan_amount)/1000000,2), ' M') as 'MTD Total Funded Amount' from bankloan where month(issue_date) = 12 and year(issue_date) = 2021;
```

	MTD Total Funded Amount
▶	53.98 M

PMTD Total Funded Amount:

```
select concat(format(sum(loan_amount)/1000000,2), ' M') as 'PMTD Total Funded Amount' from bankloan where month(issue_date) = 11 and year(issue_date) = 2021;
```

	PMTD Total Funded Amount
▶	47.75 M

MoM Total Funded Amount:

```
SELECT
```

```
((select sum(loan_amount) from bankloan  
where month(issue_date) = 12 AND year(issue_date) = 2021) -  
(select sum(loan_amount) from bankloan  
where month(issue_date) = 11 AND year(issue_date) = 2021)) /
```

```
NULLIF(
```

```
(select sum(loan_amount) from bankloan  
where month(issue_date) = 11 AND year(issue_date) = 2021), 0) * 100
```

```
as 'MOM Total Funded Amount (%)';
```

	MOM Total Funded Amount (%)
▶	13.0387

Total Amount Received:

```
select concat(format(sum(total_payment)/1000000,2),' M') 'Total Amount Received' from bankloan;
```

	Total Amount Received
▶	473.07 M

MTD Total Amount Received:

```
select concat(format(sum(total_payment)/1000000,2),' M') 'MTD Total Amount Received' from bankloan where month(issue_date) = 12 AND year(issue_date) = 2021;
```

	MTD Total Amount Received
▶	58.07 M

PMTD Total Amount Received:

```
select concat(format(sum(total_payment)/1000000,2),' M') 'PMTD Total Amount Received' from bankloan where month(issue_date) = 11 AND year(issue_date) = 2021;
```

	PMTD Total Amount Received
▶	50.13 M

MoM Total Amount Received:

SELECT

```
((select sum(total_payment) from bankloan  
where month(issue_date) = 12 AND year(issue_date) = 2021) -  
(select sum(total_payment)  
from bankloan  
where month(issue_date) = 11 AND year(issue_date) = 2021)) /  
NULLIF(  
(select sum(total_payment) from bankloan  
where month(issue_date) = 11 AND year(issue_date) = 2021), 0) * 100  
as 'MOM Total Amount Received(%)';
```

	MOM Total Amount Received(%)
▶	15.8429

Average Interest Rate:

```
select concat(format(avg(int_rate)*100,2),' %') 'Average Interest Rate' from bankloan;
```

	Average Interest Rate
▶	12.05 %

MTD Average Interest:

```
select concat(format(avg(int_rate)*100,2),' %') 'MTD Average Interest Rate' from bankloan where month(issue_date) = 12 and year(issue_date) = 2021;
```

	MTD Average Interest Rate
▶	12.36 %

PMTD Average Interest:

```
select concat(format(avg(int_rate)*100,2),' %') 'PMTD Average Interest Rate' from bankloan where month(issue_date) = 11 and year(issue_date) = 2021;
```

	PMTD Average Interest Rate
▶	11.94 %

MoM Average Interest:

SELECT

```
((select avg(int_rate) from bankloan where month(issue_date) = 12 AND year(issue_date) = 2021) - (select avg(int_rate) from bankloan where month(issue_date) = 11 AND year(issue_date) = 2021)) /
```

NULLIF(

```
(select avg(int_rate) from bankloan where month(issue_date) = 11 AND year(issue_date) = 2021), 0) * 100
```

```
as 'MOM Interest Rate(%)';
```

	MOM Interest Rate(%)
▶	3.4695455344031783

Avg DTI:

```
select concat(format(avg(dti)*100,2),' %') 'Average DTI' from bankloan;
```

	Average DTI
▶	13.33 %

MTD Avg DTI:

```
select concat(format(avg(dti)*100,2),' %') 'MTD Average DTI' from bankloan where  
month(issue_date) = 12 and year(issue_date) = 2021;
```

	MTD Average DTI
▶	13.67 %

PMTD Avg DTI:

```
select concat(format(avg(dti)*100,2),' %') 'PMTD Average DTI' from bankloan where  
month(issue_date) = 11 and year(issue_date) = 2021;
```

	PMTD Average DTI
▶	13.30 %

PMTD Avg DTI:

SELECT

```
((select avg(dti) from bankloan  
where month(issue_date) = 12 AND year(issue_date) = 2021) -  
(select avg(dti) from bankloan  
where month(issue_date) = 11 AND year(issue_date) = 2021)) /
```

NULLIF(

```
(select avg(dti) from bankloan  
where month(issue_date) = 11 AND year(issue_date) = 2021), 0) * 100
```

as 'MOM Interest Rate(%)';

	MOM Interest Rate(%)
▶	2.7272906021966534

GOOD LOAN ISSUED

Good Loan Percentage:

Select (format((count(case when loan_status = 'Fully Paid' or loan_status = 'Current' then id end) * 100) / count(id),2)) 'Good loan Percentage' from bankloan;

	Good loan Percentage
▶	86.18

Good Loan Applications:

select concat (format(count(id)/1000,2), ' K') 'Good loan Applications' from bankloan where loan_status in ('Fully Paid' , 'Current');

	Good loan Applications
▶	33.24 K

Good Loan Funded Amount:

select concat (format(sum(loan_amount)/1000000,2), ' M') 'Good Loan Funded Amount' from bankloan where loan_status in ('Fully Paid' , 'Current');

	Good Loan Funded Amount
▶	370.22 M

Good Loan Amount Received:

select concat(format(sum(total_payment)/1000000,2), ' M') 'Good Loan Received Amount' from bankloan where loan_status in ('Fully Paid' , 'Current');

	Good Loan Received Amount
▶	435.79 M

BAD LOAN ISSUED

Bad Loan Percentage:

Select (format((count(case when loan_status = 'Charged off' then id end) * 100) / count(id),2)) 'Bad Loan Percentage' from bankloan;

	Bad Loan Percentage
▶	13.82

Bad Loan Applications:

select concat(format(count(id)/1000,2), ' K') 'Bad loan Applications' from bankloan where loan_status in ('Charged off');

	Bad loan Applications
▶	5.33 K

Bad Loan Funded Amount:

`select concat(format(sum(loan_amount)/1000000,2), ' M') 'Bad Loan Funded Amount' from bankloan where loan_status in ('Charged off');`

	Bad Loan Funded Amount
▶	65.53 M

Bad Loan Amount Received:

`select concat(format(sum(total_payment)/1000000,2), ' M') 'Bad Loan Received Amount' from bankloan where loan_status in ('Charged off');`

	Bad Loan Received Amount
▶	37.28 M

LOAN STATUS

`select loan_status 'Loan Status', concat(format(count(id)/1000, 2), ' K') 'Total Applications',
concat(format(sum(loan_amount)/1000000, 2), ' M') 'Total Funded Amount',
concat(format(sum(total_payment)/1000000, 2), ' M') 'Total Amount Received',
concat(format(avg(int_rate)*100, 2), '%') 'Average Interest Rate',
concat(format(avg(dti)*100, 2), '%') 'Average DTI' from bankloan group by loan_status;`

	Loan Status	Total Applications	Total Funded Amount	Total Amount Received	Average Interest Rate	Average DTI
▶	Charged Off	5.33 K	65.53 M	37.28 M	13.88 %	14.00 %
	Fully Paid	32.15 K	351.36 M	411.59 M	11.64 %	13.17 %
	Current	1.10 K	18.87 M	24.20 M	15.10 %	14.72 %

`select loan_status 'Loan Status',
concat(format(sum(loan_amount)/1000000, 2), ' M') 'MTD Total Funded Amount',
concat(format(sum(total_payment)/1000000, 2), ' M') 'MTD Total Amount Received'
from bankloan where month(issue_date) = 12 group by loan_status;`

	Loan Status	MTD Total Funded Amount	MTD Total Amount Received
▶	Fully Paid	41.30 M	47.82 M
	Charged Off	8.73 M	5.32 M
	Current	3.95 M	4.93 M

B: BANK LOAN REPORT | OVERVIEW

MONTH

Monthly trends by Issue Date:

```
select month(issue_date) 'Month No.', monthname(issue_date) 'Month Name',  
       concat(format(count(id)/1000,2), ' K') 'Total Applications',  
       concat(format(sum(loan_amount)/1000000,2), ' M') 'Total Funded Amount',  
       concat(format(sum(total_payment)/1000000,2), ' M') 'Total Amount Received'  
from bankloan  
group by month(issue_date), monthname(issue_date)  
order by month(issue_date);
```

	Month No.	Month Name	Total Applications	Total Funded Amount	Total Amount Received
▶	1	January	2.33 K	25.03 M	27.58 M
	2	February	2.28 K	24.65 M	27.72 M
	3	March	2.63 K	28.88 M	32.26 M
	4	April	2.76 K	29.80 M	32.50 M
	5	May	2.91 K	31.74 M	33.75 M
	6	June	3.18 K	34.16 M	36.16 M
	7	July	3.37 K	35.81 M	38.83 M
	8	August	3.44 K	38.15 M	42.68 M
	9	September	3.54 K	40.91 M	43.98 M
	10	October	3.80 K	44.89 M	49.40 M
	11	November	4.04 K	47.75 M	50.13 M
	12	December	4.31 K	53.98 M	58.07 M

STATE

```
select address_state as State,  
       count(id) 'Total Applications',  
       concat(format(sum(loan_amount)/1000000,2), ' M') 'Total Funded Amount',  
       concat(format(sum(total_payment)/1000000,2), ' M') 'Total Amount Received'  
from bankloan  
group by State order by count(id) desc;
```


	State	Total Applications	Total Funded Amount	Total Amount Received
►	CA	6894	78.48 M	83.90 M
	NY	3701	42.08 M	46.11 M
	FL	2773	30.05 M	31.60 M
	TX	2664	31.24 M	34.39 M
	NJ	1822	21.66 M	23.43 M
	IL	1486	17.12 M	18.88 M
	PA	1482	15.83 M	17.46 M
	VA	1375	15.98 M	17.71 M
	GA	1355	15.48 M	16.73 M
	MA	1310	15.05 M	16.68 M
	OH	1188	12.99 M	14.33 M
	MD	1027	11.91 M	12.99 M
	AZ	833	9.21 M	10.04 M
	WA	805	8.86 M	9.53 M

TERM

select term Term,

concat(format(count(id)/1000,2),' K') 'Total Applications',

concat(format(sum(loan_amount)/1000000,2), ' M') 'Total Funded Amount',

concat(format(sum(total_payment)/1000000,2), ' M') 'Total Amount Received'

from bankloan

group by term order by term;

	Term	Total Applications	Total Funded Amount	Total Amount Received
►	36 months	28.24 K	273.04 M	294.71 M
	60 months	10.34 K	162.72 M	178.36 M

EMPLOYEE LENGTH

select emp_length 'Employee length',

concat(format(count(id)/1000,2),' K') 'Total Applications',

concat(format(sum(loan_amount)/1000000,2), ' M') 'Total Funded Amount',

concat(format(sum(total_payment)/1000000,2), ' M') 'Total Amount Received'

from bankloan

group by emp_length order by emp_length;

	Employee length	Total Applications	Total Funded Amount	Total Amount Received
▶	< 1 year	4.58 K	44.21 M	47.55 M
	1 year	3.23 K	32.88 M	35.50 M
	10+ years	8.87 K	116.12 M	125.87 M
	2 years	4.38 K	44.97 M	49.21 M
	3 years	4.09 K	43.94 M	47.55 M
	4 years	3.43 K	37.60 M	40.96 M
	5 years	3.27 K	36.97 M	40.40 M
	6 years	2.23 K	25.61 M	27.91 M
	7 years	1.77 K	20.81 M	22.58 M
	8 years	1.48 K	17.56 M	19.03 M
	9 years	1.26 K	15.08 M	16.52 M

PURPOSE

```
select purpose 'Loan Purpose',
       count(id) 'Total Applications',
       concat(format(sum(loan_amount)/1000000,2), ' M') 'Total Funded Amount',
       concat(format(sum(total_payment)/1000000,2), ' M') 'Total Amount Received'
from bankloan
group by purpose order by purpose;
```

	Loan Purpose	Total Applications	Total Funded Amount	Total Amount Received
▶	car	1497	10.22 M	11.32 M
	credit card	4998	58.89 M	65.21 M
	Debt consolidation	18214	232.46 M	253.80 M
	educational	315	2.16 M	2.25 M
	home improvement	2876	33.35 M	36.38 M
	house	366	4.82 M	5.19 M
	major purchase	2110	17.25 M	18.68 M
	medical	667	5.53 M	5.85 M
	moving	559	3.75 M	4.00 M
	other	3824	31.16 M	33.29 M
	renewable_energy	94	0.85 M	0.90 M
	small business	1776	24.12 M	23.81 M
	vacation	352	1.97 M	2.12 M
	wedding	928	9.23 M	10.27 M

HOME OWNERSHIP

```
select home_ownership 'Home Ownership',
       count(id) 'Total Applications',
       concat(format(sum(loan_amount)/1000000,2), ' M') 'Total Funded Amount',
       concat(format(sum(total_payment)/1000000,2), ' M') 'Total Amount Received'
from bankloan group by home_ownership order by count(id) desc;
```

	Loan Purpose	Total Applications	Total Funded Amount	Total Amount Received
▶	car	1497	10.22 M	11.32 M
	credit card	4998	58.89 M	65.21 M
	Debt consolidation	18214	232.46 M	253.80 M
	educational	315	2.16 M	2.25 M
	home improvement	2876	33.35 M	36.38 M
	house	366	4.82 M	5.19 M
	major purchase	2110	17.25 M	18.68 M
	medical	667	5.53 M	5.85 M
	moving	559	3.75 M	4.00 M
	other	3824	31.16 M	33.29 M
	renewable_energy	94	0.85 M	0.90 M
	small business	1776	24.12 M	23.81 M
	vacation	352	1.97 M	2.12 M
	wedding	928	9.23 M	10.27 M

Note: We have applied multiple Filters on all the dashboards. We 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 choose the Grade A in the filters for dashboards.

```
select purpose 'Loan Purpose',
       count(id) 'Total Applications',
       concat(format(sum(loan_amount)/1000000,2), ' M') 'Total Funded Amount',
       concat(format(sum(total_payment)/1000000,2), ' M') 'Total Amount Received'
from bankloan
Where grade = "A"
group by purpose order by purpose;
```

```
select emp_length 'Employee length',
       concat(format(count(id)/1000,2), ' K') 'Total Applications',
       concat(format(sum(loan_amount)/1000000,2), ' M') 'Total Funded Amount',
       concat(format(sum(total_payment)/1000000,2), ' M') 'Total Amount Received'
from bankloan
Where grade = "A"
group by emp_length order by emp_length;
```