BANK LOAN REPORT QUERY DOCUMENT

A: BANK LOAN REPORT | SUMMARY

KPI's:

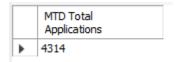
Total Loan Applications:

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



MTD Loan Applications:

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



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

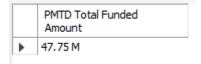
MTD Total Funded Amount:

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;



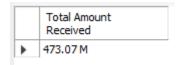
MoM Total Funded Amount:

SELECT

13.0387

Total Amount Received:

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



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;



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;



MoM Total Amount Received:

Received(%) 15.8429

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(%)';
```

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

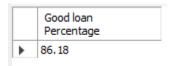
as 'MOM Interest Rate(%)';

	MOM Interest Rate(%)
•	2.7272906021966534

GOOD LOAN ISSUED

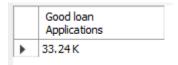
Good Loan Percentage:

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 Applications:

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



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
١	370.22 M

Good Loan Amount Received:

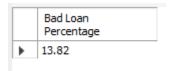
select concat(format(sum(total_payment)/1000000,2), 'M') 'Good Loan Received Amount' from bankloan where loan_status in ('Fully Paid', 'Current');



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 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
Þ	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
	ОН	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
١	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