

## -- Loan Term Analysis

```
Select term,  
COUNT(id) Total_Loan_Application,  
SUM(loan_amount) Total_Funded_Amount,  
SUM(total_payment) Total_Received_Amount  
from BankLoanData  
Group by term  
Order by term
```

116 %

Results Messages

	term	Total_Loan_Application	Total_Funded_Amount	Total_Received_Amount
1	36 months	28237	273041225	294709458
2	60 months	10339	162715850	178361475

-- Find Average Debt-to-Income Ratio (DTI)

```
SELECT Round(AVG(DTI),4) * 100 Avg_DTI from BankLoanData
```

116 %

Results Messages

	Avg_DTI
--	---------

1	13.33
---	-------

```
-- Find the Bad Loan Funded Amount
```

```
SELECT SUM(loan_amount) Bad_Loan_Funded_Amount from BankLoanData  
WHERE loan_status = 'Charged off'
```

127 %

Results Messages

	Bad_Loan_Funded_Amount
--	------------------------

1	65532225
---	----------

-- Find the Bad Loan Amount Received

```
SELECT SUM(total_payment) Bad_Loan_Received_Amount from BankLoanData  
WHERE loan_status = 'Charged off'
```

127 %

Results Messages

	Bad_Loan_Received_Amount
--	--------------------------

1	37284763
---	----------

-- Find Total Number of Loan application

```
SELECT COUNT(id) Total_Loan_Application FROM BankLoanData;
```

16 %

Results Messages

	Total_Loan_Application
--	------------------------

1	38576
---	-------

```
-- Find Good Loan Applications
```

```
SELECT COUNT(id) Good_Loan_Applications From BankLoanData  
Where loan_status = 'Fully Paid' OR loan_status = 'Current'
```

116 %

Results Messages

	Good_Loan_Applications
1	33243

```
-- Find PMTD Total Amount Received
```

```
SELECT SUM(total_payment) as PMTD_Total_Received_Amount from BankLoanData  
WHERE MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021
```

127 %

Results Messages

	PMTD_Total_Received_Amount
--	----------------------------

1	50132030
---	----------

-- Find Good Loan Application Percentage

SELECT

COUNT(CASE WHEN loan\_status = 'Fully Paid' OR loan\_status = 'Current'  
Then id  
END) \*100 / COUNT(id) as Good\_Loan\_Percentage

From BankLoanData

6 %

Results Messages

	Good_Loan_Percentage
--	----------------------

	86
--	----



-- Find the MTD Average Interest Rate

```
SELECT Round(AVG(int_rate),6) * 100 MTD_Avg_Interest_Rate from BankLoanData  
WHERE MONTH(issue_date) = 12 And YEAR(issue_date) = 2021
```

127 %

Results Messages

	MTD_Avg_Interest_Rate
--	-----------------------

1	12.356
---	--------

-- Find Good Loan Total Received Amount

```
SELECT SUM(total_payment) Good_Loan_Received_Amount FROM BankLoanData  
Where loan_status = 'Fully Paid' OR loan_status = 'Current'
```

127 %

Results Messages

	Good_Loan_Received_Amount
--	---------------------------

1	435786170
---	-----------

```
-- Find Monthly Trend by Issue Date
```

```
Select
```

```
MONTH(issue_date) Month_Number,  
DATENAME(Month, issue_date) Month_Name,  
COUNT(id) Total_Loan_Application,  
SUM(loan_amount) Total_Funded_Amount,  
SUM(total_payment) Total_Received_Amount  
from BankLoanData  
Group by MONTH(issue_date), DATENAME(Month, issue_date)  
Order By MONTH(issue_date)
```

105 %

Results Messages

	Month_Number	Month_Name	Total_Loan_Application	Total_Funded_Amount	Total_Received_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

```
-- Find Good Loan Funded Amount
```

```
SELECT SUM(loan_amount) Good_Loan_Funded_Amount FROM BankLoanData  
Where loan_status = 'Fully Paid' OR loan_status = 'Current'
```

116 %

Results Messages

	Good_Loan_Funded_Amount
1	370224850

-- Find the Average Interest Rate

```
SELECT Round(AVG(int_rate),6) * 100 Avg_Interest_Rate from BankLoanData
```

127 %

Results Messages

	Avg_Interest_Rate
1	12.0488

-- Find PMTD Total Funded Amount

```
SELECT SUM(Loan_amount) PMTD_Total_Funded_Amount  
FROM BankLoanData  
WHERE MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021
```

16 %

Results Messages

	PMTD_Total_Funded_Amount
1	47754825

```
-- Find Total Funded Amount
```

```
SELECT SUM(Loan_amount) Total_Funded_Amount from BankLoanData;
```

6 %

Results Messages

	Total_Funded_Amount
--	---------------------

1	435757075
---	-----------



## -- Employee Length Analysis

```
-- Select emp_length,  
COUNT(id) Total_Loan_Application,  
SUM(loan_amount) Total_Funded_Amount,  
SUM(total_payment) Total_Received_Amount  
from BankLoanData  
Group by emp_length  
Order by COUNT(id) DESC
```

127 %

Results Messages

	emp_length	Total_Loan_Application	Total_Funded_Amount	Total_Received_Amount
1	10+ years	8870	116115950	125871616
2	< 1 year	4575	44210625	47545011
3	2 years	4382	44967975	49206961
4	3 years	4088	43937850	47551832
5	4 years	3428	37600375	40964850
6	5 years	3273	36973625	40397571
7	1 year	3229	32883125	35498348
8	6 years	2228	25612650	27908658
9	7 years	1772	20811725	22584136
10	8 years	1476	17558950	19025777
11	9 years	1255	15084225	16516173



```
-- Find Bad Loan Application Percentage
SELECT COUNT(CASE WHEN loan_Status = 'Charged off'
                then id END) * 100
       / COUNT(id) Bad_Loan_Percentage
from BankLoanData
```

116 %

Results Messages

	Bad_Loan_Percentage
1	13

```
-- Find PMTD Average Debt-to-Income Ratio (DTI)
```

```
SELECT Round(AVG(DTI),4) * 100 PMTD_Avg_DTI from BankLoanData  
Where MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021
```

116 %

Results Messages

	PMTD_Avg_DTI
--	--------------

1	13.3
---	------

--Find Bad Loan Applications

```
SELECT COUNT(id) Bad_Loan_Applications from BankLoanData  
WHERE loan_status = 'Charged off'
```

127 %

Results Messages

Bad_Loan_Applications	
1	5333

-- Loan Purpose breakdown

```
Select purpose,  
COUNT(id) Total_Loan_Application,  
SUM(loan_amount) Total_Funded_Amount,  
SUM(total_payment) Total_Received_Amount  
from BankLoanData  
Group by purpose  
Order by COUNT(id) DESC
```

128 %

	purpose	Total_Loan_Application	Total_Funded_Amount	Total_Received_Amount
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

```
-- Find Total Amount Received
```

```
SELECT SUM(total_payment) as Total_Received_Amount from BankLoanData
```

127 %

Results Messages

	Total_Received_Amount
--	-----------------------

1	473070933
---	-----------

```
-- Find Previous Month to Date Total Number of Loan application  
SELECT COUNT(id) PMTD_Total_Loan_Application  
FROM BankLoanData  
WHERE MONTH(issue_date) = 11 AND YEAR(issue_date) = 2021
```

16 %

Results Messages

	PMTD_Total_Loan_Application
1	4035



## -- Regional Analysis by State

```
-- Select address_state,  
COUNT(id) Total_Loan_Application,  
SUM(loan_amount) Total_Funded_Amount,  
SUM(total_payment) Total_Received_Amount  
from BankLoanData  
Group by address_state  
Order by SUM(loan_amount) DESC  
-- OR You can Order by Count(id) DESC
```

127 %

Results Messages

	address_state	Total_Loan_Application	Total_Funded_Amount	Total_Received_Amount
1	CA	6894	78484125	83901234
2	NY	3701	42077050	46108181
3	TX	2664	31236650	34392715
4	FL	2773	30046125	31601905
5	NJ	1822	21657475	23425159
6	IL	1486	17124225	18875941
7	VA	1375	15982650	17711443
8	PA	1482	15826525	17462908
9	GA	1355	15480325	16728040
10	MA	1310	15051000	16676279
11	OH	1188	12991375	14330148

## -- Home OwnerShip Analysis

```
SELECT home_ownership,  
COUNT(id) Total_Loan_Application,  
SUM(loan_amount) Total_Funded_Amount,  
SUM(total_payment) Total_Received_Amount  
from BankLoanData  
Group by home_ownership  
Order by COUNT(id) DESC
```

127 %

Results Messages

	home_ownership	Total_Loan_Application	Total_Funded_Amount	Total_Received_Amount
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



```
-- Find MTD Average Debt-to-Income Ratio (DTI)
```

```
SELECT Round(AVG(DTI),4) * 100 MTD_Avg_DTI from BankLoanData  
Where MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021
```

6 %

Results Messages

	MTD_Avg_DTI
--	-------------

1	13.67
---	-------

```
-- Loan Status Grid view
```

```
Select
```

```
loan_status,
```

```
COUNT(id) Total_Loan_Application,
```

```
Sum(loan_amount) Total_Funded_Amount,
```

```
Sum(total_payment) Total_Received_Amount,
```

```
Round(Avg(int_rate * 100),2) Interest_Rate,
```

```
Round(Avg(dti * 100),2) DTI
```

```
from BankLoanData
```

```
Group by loan_status
```

105 %

Results Messages

	loan_status	Total_Loan_Application	Total_Funded_Amount	Total_Received_Amount	Interest_Rate	DTI
1	Fully Paid	32145	351358350	411586256	11.64	13.17
2	Charged Off	5333	65532225	37284763	13.88	14
3	Current	1098	18866500	24199914	15.1	14.72

-- Find MTD Total Funded Amount

```
SELECT SUM(Loan_amount) MTD_Total_Funded_Amount  
FROM BankLoanData  
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021
```

6 %

Results Messages

	MTD_Total_Funded_Amount
1	53981425

-- Find the PMTD Average Interest Rate

```
SELECT Round(AVG(int_rate),6) * 100 PMTD_Avg_Interest_Rate from BankLoanData  
WHERE MONTH(issue_date) = 11 And YEAR(issue_date) = 2021
```

127 %

Results Messages

	PMTD_Avg_Interest_Rate
1	11.9417

```
-- Comparison between Month to Date Amount funded
-- and Month to Date Amount Received by Loan Status
Select
loan_status,
SUM(loan_amount) MTD_Funded_Amount,
Sum(total_payment) MTD_Received_Amount
from BankLoanData
Where Month(issue_date) = 12 AND YEAR(issue_date) = 2021
Group by loan_status
```

105 %

Results Messages

	loan_status	MTD_Funded_Amount	MTD_Received_Amount
1	Fully Paid	41302025	47815851
2	Charged Off	8732775	5324211
3	Current	3946625	4934318

-- Find Month to Date Total Number of Loan application

```
SELECT COUNT(id) MTD_Total_Loan_Application  
FROM BankLoanData  
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021
```

116 %

Results Messages

	MTD_Total_Loan_Application
1	4314

-- Find MTD Total Amount Received

```
SELECT SUM(total_payment) as MTD_Total_Received_Amount from BankLoanData  
WHERE MONTH(issue_date) = 12 AND YEAR(issue_date) = 2021
```

%

Results Messages

MTD_Total_Received_Amount
---------------------------

58074380
----------



## -- Employee Length Analysis

```
Select emp_length,  
COUNT(id) Total_Loan_Application,  
SUM(loan_amount) Total_Funded_Amount,  
SUM(total_payment) Total_Received_Amount  
from BankLoanData  
Group by emp_length  
Order by emp_length
```

96 %

Results Messages

	emp_length	Total_Loan_Application	Total_Funded_Amount	Total_Received_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