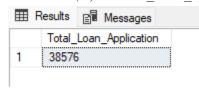# Summary

KPI's:
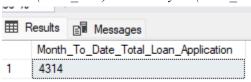
1. Total Loan Applications:

   select count(id) as Total_Loan_Applications from loananalysis.financial_loan;

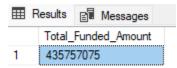 | | Total_Loan_Application |
   |---|---|
   | 1 | 38576 |

2. Month to Date Total Loan Applications:

   Select Count(id) as Month_To_Date_Total_Loan_Application from Loan where month(issue_date) = 12 and year(issue_date) = 2021;
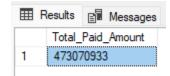
	Month_To_Date_Total_Loan_Application
1	4314

3. Total Funded Amount

   select Sum(loan_amount) as Total_Funded_Amount from Loan;

	Total_Funded_Amount
1	435757075

4. Total Paid Amount

   Select sum(total_payment) as Total_Paid_Amount from Loan;

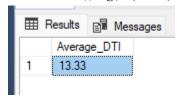 | | Total_Paid_Amount |
   |---|---|
   | 1 | 473070933 |

5. Average Interest Rate

   *Select round((Avg(int_rate) * 100),2) as Average_Interest_Rate from Loan;*

	Average_Interest_Rate
1	12.05

6. Average Debt to Interest Ratio

   *Select Round((Avg(dti)*100),2) as Average_DTI from Loan;*

	Average_DTI
1	13.33

7. Good Loan Percentage

SELECT
  (SUM(
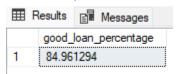   *CASE*
      WHEN loan_status = 'Fully Paid' OR loan_status = 'Current'
        THEN (CASE WHEN loan_amount IS NULL THEN 0 ELSE CAST(loan_amount AS DECIMAL(18, 2)) END)
    *END) * 100)*
  / NULLIF(SUM(CAST(loan_amount AS DECIMAL(18, 2))), 0) AS good_loan_percentage
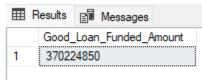*FROM loan;*

	good_loan_percentage
1	84.961294

8. Good Loan Applications

Select Count(id) as Good_Loan_Applications from Loan where loan_status = 'Fully Paid' or loan_status = 'Current';

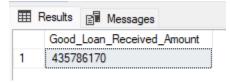|	Good_Loan_Applications
1	33243

9. Good Loan Funded Amount

Select Sum(loan_amount) as Good_Loan_Funded_Amount from Loan where loan_status = 'Fully Paid' or loan_status = 'Current';

	Good_Loan_Funded_Amount
1	370224850

10. Good Loan Received Amount

Select Sum(total_payment) as Good_Loan_Received_Amount from Loan where loan_status = 'Fully Paid' or loan_status = 'Current';

	Good_Loan_Received_Amount
1	435786170

11. Bad Loan Percentage
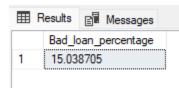
SELECT
  (SUM(
    CASE
      WHEN loan_status = 'Charged Off'
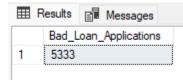   *THEN (CASE WHEN loan_amount IS NULL THEN 0 ELSE CAST(loan_amount AS DECIMAL(18, 2)) END)*

END) * 100)
*   / NULLIF(SUM(CAST(loan_amount AS DECIMAL(18, 2))), 0) AS Bad_loan_percentage*
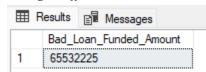*FROM loan;*

	Bad_loan_percentage
1	15.038705

12. Bad Loan Applications

Select Count(id) as Bad_Loan_Applications from Loan where loan_status = 'Charged Off';

	Bad_Loan_Applications
1	5333

13. Bad Loan Funded Amount

Select Sum(loan_amount) as Bad_Loan_Funded_Amount from Loan where loan_status = 'Charged Off';

	Bad_Loan_Funded_Amount
1	65532225

14. Bad Loan Received Amount

Select Sum(total_payment) as Bad_Loan_Recieved_Amount from Loan where loan_status = 'Charged Off';

	Bad_Loan_Recieved_Amount
1	37284763

15. Loan Status Grade View

Select
*   loan_status,*
*   Count(Id) as LoanCount,*
*   SUM(total_payment) as Total_Received_Amount,*
*   SUM(loan_Amount) as Total_Funded_Amount,*
*   Round(Avg(int_rate * 100),2) as Interest_Rate,*
*   Round(Avg(dti * 100),2) as DTI*
from
*   Loan*
group by
*   Loan_status*

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

16. Monthly Trend

Select

> *Month(issue_date),*
> *Datename(month, issue_date) as Month_Name,*
> *Count(id) as Total_Loan_Application,*
> *Sum(loan_amount) as Total_Funded_Amount,*
> *Sum(total_payment) as Total_Received_Amount*

from Loan
Group By Month(issue_date), Datename(Month,issue_date)
order by Month(issue_date);

	(No column name)	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

17. Regional Analysis

Select

> *address_state,*
> *Count(id) as Total_Loan_Application,*
> *Sum(loan_amount) as Total_Funded_Amount,*
> *Sum(total_payment) as Total_Received_Amount*

from Loan
Group By address_state
order by Sum(loan_amount) DESC;

	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
12	MD	1027	11911400	12985170
13	AZ	833	9206000	10041986

18. Term Analysis

Select

  term,
  Count(id) as Total_Loan_Application,
  Sum(loan_amount) as Total_Funded_Amount,
  Sum(total_payment) as Total_Received_Amount
from Loan
Group By term
order by term DESC;

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

19. Employment Length Analysis

Select

  emp_length,
  Count(id) as Total_Loan_Application,
  Sum(loan_amount) as Total_Funded_Amount,
  Sum(total_payment) as Total_Received_Amount
from Loan
Group By emp_length
order by emp_length;

	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

20. Purpose Analysis

Select

    Purpose,
    Count(id) as Total_Loan_Application,
    Sum(loan_amount) as Total_Funded_Amount,
    Sum(total_payment) as Total_Received_Amount

from Loan
Group By Purpose
order by Total_Loan_Application DESC;

	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

21. Home Ownership Analysis

Select

    home_ownership,
    Count(id) as Total_Loan_Application,

Sum(loan_amount) as Total_Funded_Amount,
Sum(total_payment) as Total_Received_Amount
from Loan
Group By home_ownership
order by Total_Loan_Application DESC;

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