

Loan Performance & Customer Credit Insights

-- 1. Total Number of Customers

```
SELECT COUNT(customer_id) AS Total_Number_Customers FROM Customers;
```

-- 2. Total Number of Loans

```
SELECT COUNT(*) AS No_Loans FROM Loans;
```

-- 3. Total Loan Amount Outstanding

```
SELECT SUM(loan_amount) AS Total_Loan_Outstanding FROM Loans;
```

-- 4. Total Repayments Made

```
SELECT SUM(payment_amount) AS Total_Repayments_Amount FROM Repayments;
```

-- 5. Total Transaction Amount

```
SELECT SUM(transaction_amount) AS Total_Transaction_Amount FROM Transactions;
```

-- 6. Total Credit Score for All Customers

```
SELECT SUM(score) AS Total_Credit_Score FROM credit_scores;
```

-- 7. Average Loan Amount per Customer

```
SELECT customer_id, AVG(loan_amount) AS Average_Loan_Amount FROM Loans  
GROUP BY customer_id;
```

-- 8. Average Credit Score

```
SELECT AVG(score) AS Average_Credit_Score FROM credit_scores;
```

-- 9. Average Transaction Amount

```
SELECT AVG(transaction_amount) AS Average_Transaction_Amount FROM  
Transactions;
```

-- 10. Approved Loan Count

```
SELECT COUNT(*) AS Approved_Loan_Count FROM Loans WHERE status = 'Approved';
```

-- 11. Loan Amounts by Type

```
SELECT loan_type, SUM(loan_amount) AS Total_Loan_Amount FROM Loans GROUP BY  
loan_type;
```

-- 12. Repayment Status Summary

SELECT status, COUNT(*) AS Repayment_Count FROM Loans GROUP BY status;

-- 13. Loan Amounts by Status

SELECT status, SUM(loan_amount) AS Total_Loan_Amount FROM Loans GROUP BY status;

-- 14. Top 5 Customers by Loan Amount

SELECT customer_id, SUM(loan_amount) AS Total_Loan_Amount FROM Loans GROUP BY customer_id ORDER BY Total_Loan_Amount DESC LIMIT 5;

-- 15. Repayments by Loan Type

SELECT l.loan_type, SUM(r.payment_amount) AS Total_Repayments_Amount FROM Loans l LEFT JOIN Repayments r ON l.loan_id = r.loan_id GROUP BY l.loan_type;

-- 16. Total Loan Amount per Customer

SELECT c.name, SUM(l.loan_amount) AS Total_Loan_Amount FROM Customers c LEFT JOIN Loans l ON c.customer_id = l.customer_id GROUP BY c.name;

-- 17. Number of Customers with Loans by Type

SELECT loan_type, COUNT(DISTINCT customer_id) AS No_Customers FROM Loans GROUP BY loan_type;

-- 18. Credit Score Distribution

SELECT score, COUNT(*) AS Score_Count FROM credit_scores GROUP BY score ORDER BY score DESC;

-- 19. Monthly Loan Applications

SELECT EXTRACT(MONTH FROM application_date) AS month, COUNT(*) AS loan_count FROM Loans GROUP BY month ORDER BY month;

-- 20. Transactions per Customer

SELECT customer_id, COUNT(*) AS Total_Transactions FROM Transactions GROUP BY customer_id;

-- 21. Customer Details with Loan and Repayment Info

```
SELECT c.name, l.loan_type, l.loan_amount, r.payment_amount FROM Customers c  
LEFT JOIN Loans l ON c.customer_id = l.customer_id LEFT JOIN Repayments r ON  
l.loan_id = r.loan_id;
```

-- 22. Customer Transactions and Loan Info

```
SELECT c.name, t.transaction_type, t.transaction_amount, l.loan_amount FROM  
Customers c LEFT JOIN Transactions t ON c.customer_id = t.customer_id LEFT JOIN  
Loans l ON c.customer_id = l.customer_id;
```

-- 23. Customers with Loan and Credit Score Info

```
SELECT c.name, l.loan_amount, cs.score FROM Customers c LEFT JOIN Loans l ON  
c.customer_id = l.customer_id LEFT JOIN credit_scores cs ON c.customer_id =  
cs.customer_id;
```

-- 24. Top 5 Customers by Total Repayments

```
SELECT c.name, SUM(r.payment_amount) AS Total_Repayments FROM Customers c  
LEFT JOIN Loans l ON c.customer_id = l.customer_id LEFT JOIN Repayments r ON  
l.loan_id = r.loan_id GROUP BY c.name ORDER BY Total_Repayments DESC LIMIT 5;
```

-- 25. Loan Amount vs Repayment by Customer

```
SELECT c.name, SUM(l.loan_amount) AS Total_Loan_Amount,  
SUM(r.payment_amount) AS Total_Repayment_Amount FROM Customers c LEFT JOIN  
Loans l ON c.customer_id = l.customer_id LEFT JOIN Repayments r ON l.loan_id =  
r.loan_id GROUP BY c.name;
```

-- 26. Percentage of Loan Applications Approved

```
SELECT (COUNT(CASE WHEN status = 'Approved' THEN 1 END) * 100.0 / COUNT(*))  
AS Approval_Rate FROM Loans;
```

-- 27. Loan Status Summary Using CASE

```
SELECT loan_id, CASE WHEN status = 'Approved' THEN 'Loan Approved' WHEN status =  
'Pending' THEN 'Loan Pending' ELSE 'Loan Rejected' END AS Loan_Status FROM Loans;
```

-- 28. Classifying Loan Amounts

```
SELECT loan_id, loan_amount, CASE WHEN loan_amount < 400000 THEN 'Low Loan  
Amount' WHEN loan_amount BETWEEN 400000 AND 800000 THEN 'Medium Loan  
Amount' ELSE 'High Loan Amount' END AS Loan_Amount_Category FROM Loans;
```

-- 29. Customer Credit Score Category

```
SELECT customer_id, score, CASE WHEN score IS NULL THEN 'Data Not Available'
WHEN score < 600 THEN 'Poor Credit Score' WHEN score BETWEEN 600 AND 700
THEN 'Average Credit Score' ELSE 'High Credit Score' END AS
Credit_Score_Classification FROM credit_scores;
```

-- 30. Transaction Types Using CASE

```
SELECT transaction_id, transaction_amount, CASE WHEN transaction_type = 'Deposit'
THEN 'Income' WHEN transaction_type = 'Withdrawal' THEN 'Expense' ELSE 'Other' END
AS Transaction_Category FROM Transactions;
```

-- 31. Loan Approval Status Using CASE

```
SELECT loan_id, CASE WHEN approval_date IS NULL THEN 'Pending' ELSE 'Approved'
END AS Loan_Status FROM Loans;
```

-- 32. Percentage of Overdue Loans

```
SELECT (COUNT(CASE WHEN r.repayment_id IS NULL THEN 1 END) * 100.0 /
COUNT(*)) AS Delinquency_Rate FROM Loans LEFT JOIN Repayments r ON
Loans.loan_id = r.loan_id;
```

-- 33. Loans Due for Repayment in the Next 30 Days

```
SELECT loan_id, loan_amount, due_date FROM Loans WHERE due_date BETWEEN
CURRENT_DATE AND CURRENT_DATE + INTERVAL '30' DAY;
```

-- 34. Top 5 Loan Types with Highest Outstanding Loan Amount

```
SELECT loan_type, SUM(loan_amount) AS Total_Outstanding_Amount FROM Loans
GROUP BY loan_type ORDER BY Total_Outstanding_Amount DESC LIMIT 5;
```

-- 35. Number of Loans in Default by Customer

```
SELECT c.name, COUNT(*) AS Defaulted_Loans FROM Customers c JOIN Loans l ON
c.customer_id = l.customer_id WHERE l.status = 'Rejected' GROUP BY c.customer_id;
```

-- 36. Credit Score and Loan Amount for Each Customer

```
SELECT c.name, cs.score, l.loan_amount FROM Customers c LEFT JOIN credit_scores
cs ON c.customer_id = cs.customer_id LEFT JOIN Loans l ON c.customer_id =
l.customer_id;
```

-- 37. Active Loan Summary by Loan Type

```
SELECT loan_type, COUNT(*) AS Active_Loans, SUM(loan_amount) AS
Total_Loan_Amount FROM Loans WHERE status = 'Approved' GROUP BY loan_type;
```

-- 38. Customers Without Repayments

**SELECT c.name FROM Customers c LEFT JOIN Loans l ON c.customer_id =
l.customer_id LEFT JOIN Repayments r ON l.loan_id = r.loan_id WHERE r.repayment_id
IS NULL;**

-- 39. Repayment Progress for Each Loan

**SELECT l.loan_id, l.loan_amount, SUM(r.payment_amount) AS Total_Repayment FROM
Loans l LEFT JOIN Repayments r ON l.loan_id = r.loan_id GROUP BY l.loan_id;**

-40 Loan Approval Rate

**SELECT
(COUNT(CASE WHEN status = 'Approved' THEN 1 END) * 100.0 / COUNT(*)) AS
approval_rate
FROM loans;**

--40 Loans with No Repayments Yet

**SELECT l.loan_id, c.name, l.loan_amount
FROM loans l
JOIN customers c ON l.customer_id = c.customer_id
LEFT JOIN repayments r ON l.loan_id = r.loan_id
WHERE r.repayment_id IS NULL;**