

1. SELECT account_id
FROM transactions
GROUP BY account_id
HAVING SUM(CASE WHEN transaction_type = 'Debit' THEN amount ELSE 0 END) >
SUM(CASE WHEN transaction_type = 'Credit' THEN amount ELSE 0 END);
2. SELECT loan_type,
100.0 * SUM(CASE WHEN status = 'Defaulted' THEN 1 ELSE 0 END) / COUNT(*) AS
default_rate_percent
FROM loans
GROUP BY loan_type;
3. SELECT DATE_TRUNC('month', timestamp) AS txn_month,
SUM(CASE WHEN transaction_type = 'Credit' THEN amount ELSE 0 END) AS total_credit,
SUM(CASE WHEN transaction_type = 'Debit' THEN amount ELSE 0 END) AS total_debit
FROM transactions
WHERE timestamp >= CURRENT_DATE - INTERVAL '1 year'
GROUP BY txn_month
ORDER BY txn_month;
4. SELECT c.customer_id,
SUM(DISTINCT a.balance) + SUM(DISTINCT l.loan_amount) AS total_value
FROM customers c
LEFT JOIN accounts a ON c.customer_id = a.customer_id
LEFT JOIN loans l ON c.customer_id = l.customer_id
GROUP BY c.customer_id
ORDER BY total_value DESC
LIMIT 10;
5. SELECT DISTINCT c.customer_id, c.first_name, c.last_name
FROM customers c
JOIN accounts a ON c.customer_id = a.customer_id
WHERE a.account_id NOT IN (
SELECT DISTINCT account_id
FROM transactions
WHERE timestamp >= CURRENT_DATE - INTERVAL '6 months'
);
6. SELECT a.account_type, AVG(t.amount) AS avg_amount
FROM transactions t
JOIN accounts a ON t.account_id = a.account_id
GROUP BY a.account_type;
7. SELECT DATE_TRUNC('month', opened_date) AS month, COUNT(*) AS new_accounts
FROM accounts
GROUP BY month
ORDER BY month;
8. SELECT customer_id, COUNT(*) AS loan_count
FROM loans
GROUP BY customer_id
ORDER BY loan_count DESC
LIMIT 1;

9. SELECT a.customer_id, AVG(t.amount) AS avg_txn
FROM transactions t
JOIN accounts a ON t.account_id = a.account_id
GROUP BY a.customer_id
HAVING AVG(t.amount) > 5000;
10. SELECT DISTINCT account_id
FROM transactions
WHERE transaction_type = 'Credit'
AND account_id NOT IN (
SELECT DISTINCT account_id
FROM transactions
WHERE transaction_type = 'Debit'
);