

- **Scenario 1**

DECLARE

CURSOR tx_cursor IS

SELECT c.CustomerID, c.Name, t.TransactionID, t.TransactionDate, t.Amount, t.TransactionType

FROM Customers c

JOIN Accounts a ON c.CustomerID = a.CustomerID

JOIN Transactions t ON a.AccountID = t.AccountID

WHERE TO_CHAR(t.TransactionDate, 'MMYYYY') = TO_CHAR(SYSDATE, 'MMYYYY')

ORDER BY c.CustomerID, t.TransactionDate;

v_cust_id Customers.CustomerID%TYPE;

v_name Customers.Name%TYPE;

v_txid Transactions.TransactionID%TYPE;

v_date Transactions.TransactionDate%TYPE;

v_amount Transactions.Amount%TYPE;

v_type Transactions.TransactionType%TYPE;

BEGIN

DBMS_OUTPUT.PUT_LINE('--- Monthly Transaction Statements ---');

OPEN tx_cursor;

LOOP

FETCH tx_cursor INTO v_cust_id, v_name, v_txid, v_date, v_amount, v_type;

EXIT WHEN tx_cursor%NOTFOUND;

DBMS_OUTPUT.PUT_LINE('Customer ID: ' || v_cust_id || ' | Name: ' || v_name);

DBMS_OUTPUT.PUT_LINE(' TxID: ' || v_txid || ', Date: ' || TO_CHAR(v_date, 'DD-MON-YYYY') || ', Type: ' || v_type || ', Amount: ' || v_amount);

END LOOP;

CLOSE tx_cursor;

END;

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- **Scenario 2**

DECLARE

CURSOR account_cursor IS

SELECT AccountID, Balance FROM Accounts;

v_account_id Accounts.AccountID%TYPE;

v_balance Accounts.Balance%TYPE;

v_fee NUMBER := 100; -- Annual maintenance fee

BEGIN

OPEN account_cursor;

LOOP

FETCH account_cursor INTO v_account_id, v_balance;

EXIT WHEN account_cursor%NOTFOUND;

IF v_balance >= v_fee THEN

UPDATE Accounts

SET Balance = Balance - v_fee,

LastModified = SYSDATE

WHERE AccountID = v_account_id;

DBMS_OUTPUT.PUT_LINE('Annual fee deducted from AccountID: ' || v_account_id);

ELSE

DBMS_OUTPUT.PUT_LINE('Insufficient balance in AccountID: ' || v_account_id);

END IF;

END LOOP;

CLOSE account_cursor;

COMMIT;

END;

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- **Scenario 3**

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DECLARE

CURSOR loan_cursor IS

    SELECT LoanID, LoanAmount, InterestRate FROM Loans;

v_loan_id Loans.LoanID%TYPE;
v_loan_amt Loans.LoanAmount%TYPE;
v_interest Loans.InterestRate%TYPE;

BEGIN

    OPEN loan_cursor;

    LOOP

        FETCH loan_cursor INTO v_loan_id, v_loan_amt, v_interest;

        EXIT WHEN loan_cursor%NOTFOUND;

        IF v_loan_amt < 10000 THEN

            UPDATE Loans

            SET InterestRate = InterestRate + 0.5

            WHERE LoanID = v_loan_id;

        ELSE

            UPDATE Loans

            SET InterestRate = InterestRate + 1

            WHERE LoanID = v_loan_id;

        END IF;

        DBMS_OUTPUT.PUT_LINE('Updated LoanID: ' || v_loan_id || ' | New Rate: ' || TO_CHAR(v_interest +
CASE WHEN v_loan_amt < 10000 THEN 0.5 ELSE 1 END));

    END LOOP;

    CLOSE loan_cursor;

    COMMIT;

END;

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