**Exercise 6: Cursors**

BEGIN

  DBMS\_OUTPUT.PUT\_LINE('Monthly Statement for Current Month:');

  FOR customer\_rec IN (SELECT CustomerID, Name FROM Customers) LOOP

    DBMS\_OUTPUT.PUT\_LINE('Customer: ' || customer\_rec.Name);

    FOR txn\_rec IN (

      SELECT t.TransactionDate, t.Amount, t.TransactionType

      FROM Transactions t

      JOIN Accounts a ON t.AccountID = a.AccountID

      WHERE a.CustomerID = customer\_rec.CustomerID

        AND TO\_CHAR(t.TransactionDate, 'MM-YYYY') = TO\_CHAR(SYSDATE, 'MM-YYYY')

    ) LOOP

      DBMS\_OUTPUT.PUT\_LINE(

        '  ' || TO\_CHAR(txn\_rec.TransactionDate, 'DD-Mon-YYYY') ||

        ' | ' || txn\_rec.TransactionType ||

        ' | Amount: ' || txn\_rec.Amount

      );

    END LOOP;

    DBMS\_OUTPUT.PUT\_LINE('--------------------------------');

  END LOOP;

END;

/

DECLARE

  CURSOR c\_accounts IS

    SELECT AccountID, Balance FROM Accounts;

  v\_fee NUMBER := 100;

BEGIN

  FOR acc\_rec IN c\_accounts LOOP

    UPDATE Accounts

    SET Balance = Balance - v\_fee

    WHERE AccountID = acc\_rec.AccountID;

  END LOOP;

  COMMIT;

  DBMS\_OUTPUT.PUT\_LINE('Annual fee applied to all accounts.');

END;

/

DECLARE

  CURSOR c\_loans IS

    SELECT LoanID, InterestRate FROM Loans;

  v\_increment NUMBER := 0.5;

BEGIN

  FOR loan\_rec IN c\_loans LOOP

    UPDATE Loans

    SET InterestRate = loan\_rec.InterestRate + v\_increment

    WHERE LoanID = loan\_rec.LoanID;

  END LOOP;

  COMMIT;

  DBMS\_OUTPUT.PUT\_LINE('Interest rates updated for all loans.');

END;

/

SET SERVEROUTPUT ON;

SELECT \* FROM Transactions;

SELECT \* FROM Accounts;

SELECT \* FROM Loans;











