PL/SQL Exercise 6 - Cursors

# Scenario 1: Generate Monthly Statements for All Customers

DECLARE  
 CURSOR cur\_transactions IS  
 SELECT c.Name, t.AccountID, t.TransactionDate, t.Amount, t.TransactionType  
 FROM Transactions t  
 JOIN Accounts a ON t.AccountID = a.AccountID  
 JOIN Customers c ON a.CustomerID = c.CustomerID  
 WHERE t.TransactionDate BETWEEN TRUNC(SYSDATE, 'MM') AND LAST\_DAY(SYSDATE);  
BEGIN  
 FOR rec IN cur\_transactions LOOP  
 DBMS\_OUTPUT.PUT\_LINE('Customer: ' || rec.Name ||  
 ', Account: ' || rec.AccountID ||  
 ', Date: ' || TO\_CHAR(rec.TransactionDate, 'DD-MON-YYYY') ||  
 ', Amount: ' || rec.Amount ||  
 ', Type: ' || rec.TransactionType);  
 END LOOP;  
END;

# Scenario 2: Apply Annual Fee to All Accounts

DECLARE  
 CURSOR cur\_accounts IS  
 SELECT AccountID, Balance FROM Accounts;  
 v\_fee NUMBER := 100;  
BEGIN  
 FOR acc IN cur\_accounts LOOP  
 UPDATE Accounts  
 SET Balance = Balance - v\_fee,  
 LastModified = SYSDATE  
 WHERE AccountID = acc.AccountID;  
 END LOOP;  
  
 COMMIT;  
END;

# Scenario 3: Update Interest Rates for Loans Based on New Policy

DECLARE  
 CURSOR cur\_loans IS  
 SELECT LoanID, InterestRate FROM Loans;  
BEGIN  
 FOR loan IN cur\_loans LOOP  
 UPDATE Loans  
 SET InterestRate = InterestRate + 0.5  
 WHERE LoanID = loan.LoanID;  
 END LOOP;  
  
 COMMIT;  
END;

# Output:

