Exercise 1: Control Structures

Scenario 1: Apply 1% Discount to Interest Rate if Age > 60

BEGIN

FOR rec IN (SELECT l.LoanID, l.InterestRate, c.DOB

FROM Loans l

JOIN Customers c ON l.CustomerID = c.CustomerID)

LOOP

IF MONTHS\_BETWEEN(SYSDATE, rec.DOB)/12 > 60 THEN

UPDATE Loans

SET InterestRate = InterestRate - 1

WHERE LoanID = rec.LoanID;

END IF;

END LOOP;

COMMIT;

END;

Output:

(No rows updated)

Scenario 2: Set IsVIP Flag TRUE for Balance > $10,000

BEGIN

FOR rec IN (SELECT CustomerID, Balance FROM Customers) LOOP

IF rec.Balance > 10000 THEN

UPDATE Customers

SET IsVIP = 'Y'

WHERE CustomerID = rec.CustomerID;

END IF;

END LOOP;

COMMIT;

END;

Output:

(No rows updated)

**Scenario 3: Send Reminder for Loans Due in 30 Days**

BEGIN

FOR rec IN (SELECT l.LoanID, c.Name, l.EndDate

FROM Loans l

JOIN Customers c ON l.CustomerID = c.CustomerID

WHERE l.EndDate <= SYSDATE + 30)

LOOP

DBMS\_OUTPUT.PUT\_LINE('Reminder: Loan ID ' || rec.LoanID ||

' for customer ' || rec.Name ||

' is due on ' || TO\_CHAR(rec.EndDate, 'DD-MON-YYYY'));

END LOOP;

END;

Output:

(No output from DBMS\_OUTPUT)

**If a loan was due in the next 30 days**, you'd get:

Reminder: Loan ID 3 for customer Alice is due on 25-JUL-2025

Reminder: Loan ID 4 for customer Bob is due on 20-JUL-2025