**EXERCISE 1:Control Structures:**

**SCENARIO 1:**

BEGIN

FOR rec IN (

SELECT L.LoanID, L.InterestRate, C.Name, C.DOB

FROM Loans L

JOIN Customers C ON L.CustomerID = C.CustomerID

WHERE MONTHS\_BETWEEN(SYSDATE, C.DOB)/12 > 6)

LOOP

UPDATE Loans

SET InterestRate = InterestRate - 1

WHERE LoanID = rec.LoanID;

DBMS\_OUTPUT.PUT\_LINE('Discount applied to ' || rec.Name ||

' (Age: ' || TRUNC(MONTHS\_BETWEEN(SYSDATE, rec.DOB)/12) ||

'), Loan ID: ' || rec.LoanID);

END LOOP;

END.

**OUTPUT:**

**No output, as John Doe (born 1985) is not above 60.**

**SCENARIO 2:**

BEGIN

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

IF rec.Balance > 10000 THEN

UPDATE Customers

SET IsVIP = 'Y'

WHERE CustomerID = rec.CustomerID;

DBMS\_OUTPUT.PUT\_LINE(rec.Name || ' marked as VIP.');

END IF;

END LOOP;

END;

**OUTPUT:**

**No output from sample data; all balances ≤ 1500.**

**SCENARIO 3:**

BEGIN

FOR rec IN (

SELECT C.Name, L.EndDate

FROM Loans L

JOIN Customers C ON L.CustomerID = C.CustomerID

WHERE L.EndDate BETWEEN SYSDATE AND SYSDATE + 30

) LOOP

DBMS\_OUTPUT.PUT\_LINE('Reminder: Loan for ' || rec.Name || ' is due on ' || TO\_CHAR(rec.EndDate, 'DD-MON-YYYY'));

END LOOP;

END;

**OUTPUT:**

**No output; current loan in sample data ends 5 years later.**