**Exercise 1: Control Structures**

**Source code:**

CREATE TABLE Customers (

CustomerID NUMBER,

Name VARCHAR2(50),

Age NUMBER,

Balance NUMBER,

IsVIP VARCHAR2(5),

LoanID NUMBER

);

CREATE TABLE Loans (

LoanID NUMBER,

CustomerID NUMBER,

InterestRate NUMBER,

DueDate DATE

);

INSERT INTO Customers VALUES (1, 'Ravi', 65, 15000, 'FALSE', 101);

INSERT INTO Customers VALUES (2, 'Meena', 45, 8000, 'FALSE', 102);

INSERT INTO Customers VALUES (3, 'Anil', 70, 5000, 'FALSE', 103);

INSERT INTO Loans VALUES (101, 1, 5.5, SYSDATE + 10);

INSERT INTO Loans VALUES (102, 2, 6.0, SYSDATE + 40);

INSERT INTO Loans VALUES (103, 3, 7.0, SYSDATE + 20);

COMMIT;

// Scenario 1: Apply 1% interest discount to customers over 60

BEGIN

FOR c IN (SELECT LoanID FROM Customers WHERE Age > 60) LOOP

UPDATE Loans

SET InterestRate = InterestRate - 0.01

WHERE LoanID = c.LoanID;

END LOOP;

COMMIT;

END;

// Scenario 2: Promote customers to VIP if balance > 10000

BEGIN

FOR c IN (SELECT CustomerID FROM Customers WHERE Balance > 10000) LOOP

UPDATE Customers

SET IsVIP = 'TRUE'

WHERE CustomerID = c.CustomerID;

END LOOP;

COMMIT;

END;

//Scenario 3: Print reminders for loans due in next 30 days

BEGIN

FOR l IN (

SELECT l.LoanID, c.Name, l.DueDate

FROM Loans l, Customers c

WHERE l.CustomerID = c.CustomerID

AND l.DueDate BETWEEN SYSDATE AND SYSDATE + 30

) LOOP

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

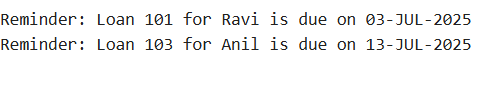
' for ' || l.Name ||

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

END LOOP;

END;

**Output :**

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