EXERCISE 1: CONTROL STRUCTURES

**Scenario 1:** Write a PL/SQL block that scans through all customers, checks their age, and applies a 1% discount on their loan interest rates if they are over 60 years old.  
  
DECLARE

CURSOR senior\_customers IS

SELECT CustomerID, (SYSDATE - DOB)/365 AS Age

FROM Customers

WHERE (SYSDATE - DOB)/365 > 60;

BEGIN

FOR customer IN senior\_customers LOOP

UPDATE Loans

SET InterestRate = InterestRate - 1

WHERE CustomerID = customer.CustomerID;

END LOOP;

COMMIT;

END;

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**Scenario 2:** Write a PL/SQL block that iterates through all customers and marks those with a balance over $10,000 as VIP.  
  
BEGIN

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

UPDATE Customers

SET IsVIP = 'TRUE'

WHERE CustomerID = customer.CustomerID;

END LOOP;

COMMIT;

END;

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**Scenario 3:** Write a PL/SQL block that fetches loans due in the next 30 days and prints a reminder message for each customer.  
  
DECLARE

CURSOR due\_loans IS

SELECT LoanID, CustomerID, EndDate

FROM Loans

WHERE EndDate BETWEEN SYSDATE AND SYSDATE + 30;

BEGIN

FOR loan IN due\_loans LOOP

DBMS\_OUTPUT.PUT\_LINE('Reminder: Loan ID ' || loan.LoanID || ' for Customer ID ' || loan.CustomerID || ' is due on ' || loan.EndDate);

END LOOP;

END;

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