**Exercise 1: Control Structures**

**Scenario 1:** The bank wants to apply a discount to loan interest rates for customers above 60 years old.

For this scenario let us assume 2 tables ,

1**.customers** having the columns as c\_id,c\_name,age,interest\_rate,bal  
2.**loans** having the columns as c\_id,c\_name,due\_date,amnt  
  
  
**Question:** Write a PL/SQL block that loops through all customers, checks their age, and if they are above 60, apply a 1% discount to their current loan interest rates.  
  
DECLARE

CURSOR c1 IS

SELECT c\_id, age, interest\_rate

FROM customers;

BEGIN

FOR i IN c1 LOOP

IF i.age > 60 THEN

UPDATE customers SET interest\_rate = interest\_rate - 1 WHERE c\_id = i.c\_id;

END IF;

END LOOP;

END;

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**Question:** Write a PL/SQL block that iterates through all customers and sets a flag IsVIP to TRUE for those with a balance over $10,000.

DECLARE

CURSOR c1 IS

SELECT c\_id, bal FROM customers;

BEGIN

FOR i IN c1 LOOP

IF i.bal > 10000 THEN

UPDATE customers SET IsVIP = 'TRUE' WHERE c\_id = i.c\_id;

END IF;

END LOOP;

END;

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

BEGIN

FOR i IN (SELECT c\_id, c\_name, due\_date, amnt FROM loans WHERE due\_date BETWEEN SYSDATE AND SYSDATE + 30 )

LOOP

DBMS\_OUTPUT.PUT\_LINE('Dear ' || i.c\_name || ' bearing an id ' || i.c\_id || ' has a loan . You need to pay ' || i.amnt || 'before' || TO\_CHAR(i.due\_date, 'DD-MON-YYYY') );

END LOOP;

END;

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