**1)i) Control Structures**

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

* + **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.**

**Scenario 2: A customer can be promoted to VIP status based on their balance.**

* + **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.**

**Scenario 3: The bank wants to send reminders to customers whose loans are due within the next 30 days.**

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

Scenerio 1-

BEGIN FOR customer IN (SELECT customer\_id, birth\_date FROM customers) LOOP IF MONTHS\_BETWEEN(SYSDATE, customer.birth\_date) / 12 > 60 THEN UPDATE loans SET interest\_rate = interest\_rate \* 0.99 WHERE customer\_id = customer.customer\_id; END IF; END LOOP; COMMIT; END; /

ii)Scenerio 2-

BEGIN

FOR customer IN (SELECT customer\_id, balance FROM customers) LOOP

IF customer.balance > 10000 THEN

UPDATE customers

SET is\_vip = 'TRUE'

WHERE customer\_id = customer.customer\_id;

END IF;

END LOOP;

COMMIT;

END;

/

iii)Scenerio 3-

BEGIN

FOR loan IN (SELECT customer\_id, loan\_id, due\_date FROM loans WHERE due\_date BETWEEN SYSDATE AND SYSDATE + 30) LOOP

DECLARE

customer\_name VARCHAR2(100);

BEGIN

SELECT name INTO customer\_name FROM customers WHERE customer\_id = loan.customer\_id;

DBMS\_OUTPUT.PUT\_LINE('Reminder: Customer ' || customer\_name || ', your loan (ID: ' || loan.loan\_id || ') is due on ' || TO\_CHAR(loan.due\_date, 'YYYY-MM-DD') || '.');

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

DBMS\_OUTPUT.PUT\_LINE('No customer found for loan ID ' || loan.loan\_id);

END;

END LOOP;

END;

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