**Exercise 1: Control Structures :**

SET SERVEROUTPUT ON;

BEGIN

EXECUTE IMMEDIATE 'DROP TABLE loans';

EXCEPTION WHEN OTHERS THEN NULL;

END;

/

BEGIN

EXECUTE IMMEDIATE 'DROP TABLE customers';

EXCEPTION WHEN OTHERS THEN NULL;

END;

/

CREATE TABLE customers (

cust\_id NUMBER PRIMARY KEY,

age NUMBER,

balance NUMBER,

vip\_flag VARCHAR2(5)

);

CREATE TABLE loans (

loan\_id NUMBER PRIMARY KEY,

cust\_id NUMBER,

int\_rate NUMBER,

due\_on DATE,

FOREIGN KEY (cust\_id) REFERENCES customers(cust\_id)

);

INSERT INTO customers VALUES (1, 65, 12000, 'FALSE');

INSERT INTO customers VALUES (2, 45, 8000, 'FALSE');

INSERT INTO customers VALUES (3, 70, 15000, 'FALSE');

INSERT INTO loans VALUES (101, 1, 10, TO\_DATE('04-JUL-2025','DD-MON-YYYY'));

INSERT INTO loans VALUES (102, 2, 9, TO\_DATE('01-SEP-2025','DD-MON-YYYY'));

INSERT INTO loans VALUES (103, 3, 8, TO\_DATE('29-JUN-2025','DD-MON-YYYY'));

COMMIT;

BEGIN

FOR loan\_rec IN (

SELECT l.loan\_id, l.cust\_id, l.int\_rate

FROM loans l

JOIN customers c ON l.cust\_id = c.cust\_id

WHERE c.age > 60

)

LOOP

UPDATE loans

SET int\_rate = int\_rate - 1

WHERE loan\_id = loan\_rec.loan\_id;

DBMS\_OUTPUT.PUT\_LINE(

'Scenario 1: 1% interest discount applied on Loan ' || loan\_rec.loan\_id ||

' (Customer ID ' || loan\_rec.cust\_id || ')'

);

END LOOP;

FOR cust\_rec IN (

SELECT cust\_id, balance FROM customers

WHERE balance > 10000

)

LOOP

UPDATE customers

SET vip\_flag = 'TRUE'

WHERE cust\_id = cust\_rec.cust\_id;

DBMS\_OUTPUT.PUT\_LINE(

' Scenario 2: VIP status set for Customer ' || cust\_rec.cust\_id ||

' (Balance: $' || cust\_rec.balance || ')'

);

END LOOP;

FOR due\_rec IN (

SELECT loan\_id, cust\_id, due\_on

FROM loans

WHERE due\_on BETWEEN SYSDATE AND SYSDATE + 30

)

LOOP

DBMS\_OUTPUT.PUT\_LINE(

'Scenario 3: Reminder - Loan ' || due\_rec.loan\_id ||

' for Customer ' || due\_rec.cust\_id ||

' is due on ' || TO\_CHAR(due\_rec.due\_on, 'DD-MON-YYYY')

);

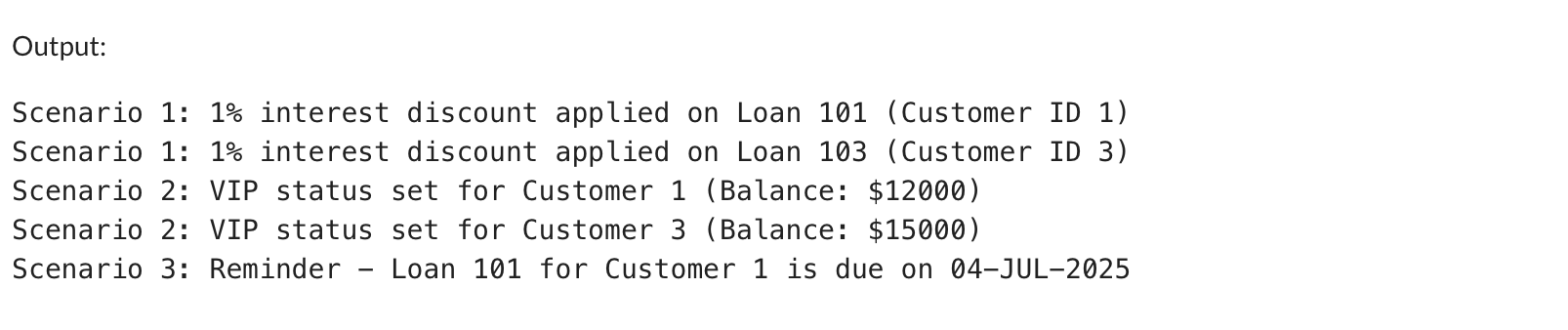
END LOOP;

COMMIT;

END;

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**OUTPUT :**

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