**Exercise 1: 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.

**Scenario 1:**

DECLARE

CURSOR customer\_cursor IS

SELECT customer\_id, age, loan\_interest\_rate

FROM customers;

updated\_interest\_rate NUMBER;

BEGIN

FOR customer\_record IN customer\_cursor LOOP

IF customer\_record.age > 60 THEN

updated\_interest\_rate := customer\_record.loan\_interest\_rate \* 0.99;

UPDATE customers

SET loan\_interest\_rate = updated\_interest\_rate

WHERE customer\_id = customer\_record.customer\_id;

END IF;

END LOOP;

COMMIT;

END;

/

**Scenario 2:**

DECLARE

CURSOR vip\_cursor IS

SELECT customer\_id, balance

FROM customers;

BEGIN

FOR vip\_record IN vip\_cursor LOOP

IF vip\_record.balance > 10000 THEN

UPDATE customers

SET IsVIP = 'Y' -- Assuming 'Y' represents TRUE in the IsVIP column

WHERE customer\_id = vip\_record.customer\_id;

END IF;

END LOOP;

COMMIT;

END;

/

**Scenario 3:**

DECLARE

CURSOR loan\_cursor IS

SELECT customer\_id, loan\_due\_date

FROM loans

WHERE loan\_due\_date BETWEEN SYSDATE AND SYSDATE + 30;

BEGIN

FOR loan\_record IN loan\_cursor LOOP

DBMS\_OUTPUT.PUT\_LINE('Reminder: Customer ID ' || loan\_record.customer\_id ||

', your loan is due on ' || TO\_CHAR(loan\_record.loan\_due\_date, 'DD-MON-YYYY'));

END LOOP;

END;

/