

Exercise 1: Control Structures

Scenario 1:

DECLARE

CURSOR customer_cursor IS

SELECT customer_id, age, loan_interest_rate

FROM customers;

v_customer_id customers.customer_id%TYPE;

v_age customers.age%TYPE;

v_loan_interest_rate customers.loan_interest_rate%TYPE;

BEGIN

OPEN customer_cursor;

LOOP

FETCH customer_cursor INTO v_customer_id, v_age, v_loan_interest_rate;

EXIT WHEN customer_cursor%NOTFOUND;

IF v_age > 60 THEN

UPDATE customers

SET loan_interest_rate = loan_interest_rate - 0.01

WHERE customer_id = v_customer_id;

END IF;

END LOOP;

CLOSE customer_cursor;

COMMIT;

END;

/

Scenario 2:

DECLARE

CURSOR customer_cursor IS

SELECT customer_id, balance

FROM customers;

v_customer_id customers.customer_id%TYPE;

v_balance customers.balance%TYPE;

```

BEGIN

OPEN customer_cursor;

LOOP

    FETCH customer_cursor INTO v_customer_id, v_balance;

    EXIT WHEN customer_cursor%NOTFOUND;

    IF v_balance > 10000 THEN

        UPDATE customers

        SET IsVIP = TRUE

        WHERE customer_id = v_customer_id;

    END IF;

END LOOP;

CLOSE customer_cursor;

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;

v_customer_id loans.customer_id%TYPE;

v_loan_due_date loans.loan_due_date%TYPE;

BEGIN

OPEN loan_cursor;

LOOP

    FETCH loan_cursor INTO v_customer_id, v_loan_due_date;

    EXIT WHEN loan_cursor%NOTFOUND;

    DBMS_OUTPUT.PUT_LINE('Reminder: Customer ' || v_customer_id ||

        ', your loan is due on ' || v_loan_due_date);

END LOOP;

```

```
CLOSE loan_cursor;
```

```
END;
```

```
/
```