**Exercise 1: Control Structures**

Scenario 1:

DECLARE

v\_customer\_id customers.customerid%TYPE;

v\_dob customers.dob%TYPE;

v\_age NUMBER;

BEGIN

FOR cust\_rec IN (SELECT customerid, dob FROM customers) LOOP

v\_customer\_id := cust\_rec.customerid;

v\_dob := cust\_rec.dob;

v\_age := TRUNC(MONTHS\_BETWEEN(SYSDATE, v\_dob) / 12);

IF v\_age > 60 THEN

UPDATE loans

SET interestrate = interestrate \* 0.99

WHERE customerid = v\_customer\_id;

END IF;

END LOOP;

COMMIT;

END;

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Scenario 2:

DECLARE

v\_customer\_id customers.customerid%TYPE;

v\_balance customers.balance%TYPE;

BEGIN

FOR cust\_rec IN (SELECT customerid, balance FROM customers) LOOP

v\_customer\_id := cust\_rec.customerid;

v\_balance := cust\_rec.balance;

IF v\_balance > 10000 THEN

UPDATE customers

SET isvip = TRUE

WHERE customerid = v\_customer\_id;

END IF;

END LOOP;

COMMIT;

END;

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Scenario 3:

DECLARE

v\_customer\_id loans.customerid%TYPE;

v\_end\_date loans.enddate%TYPE;

v\_name customers.name%TYPE;

BEGIN

FOR loan\_rec IN (SELECT customerid, enddate FROM loans WHERE enddate BETWEEN SYSDATE AND SYSDATE + 30) LOOP

v\_customer\_id := loan\_rec.customerid;

v\_end\_date := loan\_rec.enddate;

SELECT name INTO v\_name FROM customers WHERE customerid = v\_customer\_id;

DBMS\_OUTPUT.PUT\_LINE('Reminder: Dear ' || v\_name || ', your loan is due on ' || TO\_CHAR(v\_end\_date, 'YYYY-MM-DD'));

END LOOP;

END;

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