PLSQL Exercises

# Exercise 1: Control Structures - PLSQL\_Exercises

Scenario:  
You want to input an employee name and simulate a control structure in PL/SQL to print a greeting.

Code:

VARIABLE emp\_name VARCHAR2(50)

VARIABLE years NUMBER

BEGIN

    :emp\_name := 'Ramesh';

    :years := 8;

END;

/

DECLARE

    bonus NUMBER;

BEGIN

    IF :years < 2 THEN

        bonus := 0;

    ELSIF :years BETWEEN 2 AND 5 THEN

        bonus := 5000;

    ELSIF :years BETWEEN 6 AND 10 THEN

        bonus := 10000;

    ELSE

        bonus := 20000;

    END IF;

    DBMS\_OUTPUT.PUT\_LINE('--- Bonus Details ---');

    DBMS\_OUTPUT.PUT\_LINE('Employee Name: ' || :emp\_name);

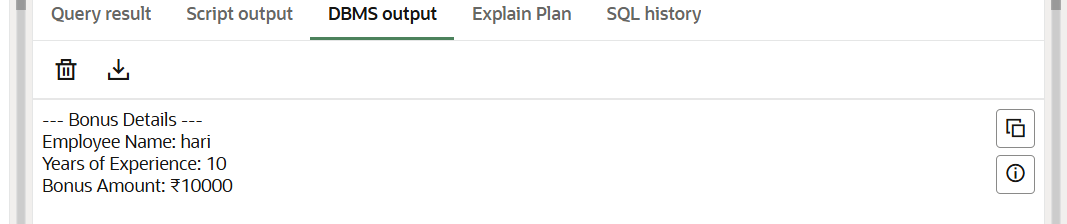
    DBMS\_OUTPUT.PUT\_LINE('Years of Experience: ' || :years);

    DBMS\_OUTPUT.PUT\_LINE('Bonus Amount: ₹' || bonus);

END;

/

OUTPUT:



# Exercise 3: Stored Procedures

Scenario:  
You want to create a procedure that displays the salary of an employee given their ID.

Code:

SET SERVEROUTPUT ON;

BEGIN

  EXECUTE IMMEDIATE 'DROP TABLE employees CASCADE CONSTRAINTS';

EXCEPTION

  WHEN OTHERS THEN

    NULL;

END;

/

CREATE TABLE employees (

  emp\_id NUMBER PRIMARY KEY,

  emp\_name VARCHAR2(50),

  salary NUMBER

);

/

BEGIN

  INSERT INTO employees VALUES (101, 'Amit', 50000);

  INSERT INTO employees VALUES (102, 'Vishal', 60000);

  INSERT INTO employees VALUES (103, 'Rahul', 70000);

  COMMIT;

END;

CREATE OR REPLACE PROCEDURE update\_salary (

  p\_emp\_id IN NUMBER,

  p\_percentage IN NUMBER

) AS

BEGIN

  UPDATE employees

  SET salary = salary + (salary \* p\_percentage / 100)

  WHERE emp\_id = p\_emp\_id;

  IF SQL%ROWCOUNT = 0 THEN

    DBMS\_OUTPUT.PUT\_LINE('❌ Employee ID ' || p\_emp\_id || ' not found.');

  ELSE

    DBMS\_OUTPUT.PUT\_LINE('✅ Salary updated for Employee ID: ' || p\_emp\_id);

  END IF;

EXCEPTION

  WHEN OTHERS THEN

    DBMS\_OUTPUT.PUT\_LINE('Error: ' || SQLERRM);

END;

/

BEGIN

  update\_salary(102, 10); -- Increase Vishal’s salary by 10%

END;

/

SELECT \* FROM employees;

Output:

