**Week 2**

**Exercise 1: Control Structures**

**Code:**

DECLARE

v\_salary NUMBER := 72000;

v\_category VARCHAR2(20);

v\_review\_count NUMBER := 1;

v\_bonus NUMBER := 0;

BEGIN

IF v\_salary < 30000 THEN

v\_category := 'Low';

ELSIF v\_salary <= 60000 THEN

v\_category := 'Medium';

ELSE

v\_category := 'High';

END IF;

DBMS\_OUTPUT.PUT\_LINE('Salary Category: ' || v\_category);

CASE v\_category

WHEN 'Low' THEN v\_bonus := 2000;

WHEN 'Medium' THEN v\_bonus := 1500;

WHEN 'High' THEN v\_bonus := 1000;

ELSE v\_bonus := 500;

END CASE;

DBMS\_OUTPUT.PUT\_LINE('Bonus Assigned: ' || v\_bonus);

FOR i IN 1..3 LOOP

DBMS\_OUTPUT.PUT\_LINE('FOR LOOP - Review #' || i);

END LOOP;

WHILE v\_review\_count <= 2 LOOP

DBMS\_OUTPUT.PUT\_LINE('WHILE LOOP - Follow-up #' || v\_review\_count);

v\_review\_count := v\_review\_count + 1;

END LOOP;

DECLARE

v\_log\_message VARCHAR2(100);

BEGIN

v\_log\_message := 'Bonus of ' || v\_bonus || ' assigned to high salary bracket.';

IF v\_category = 'High' THEN

DBMS\_OUTPUT.PUT\_LINE('[LOG]: ' || v\_log\_message);

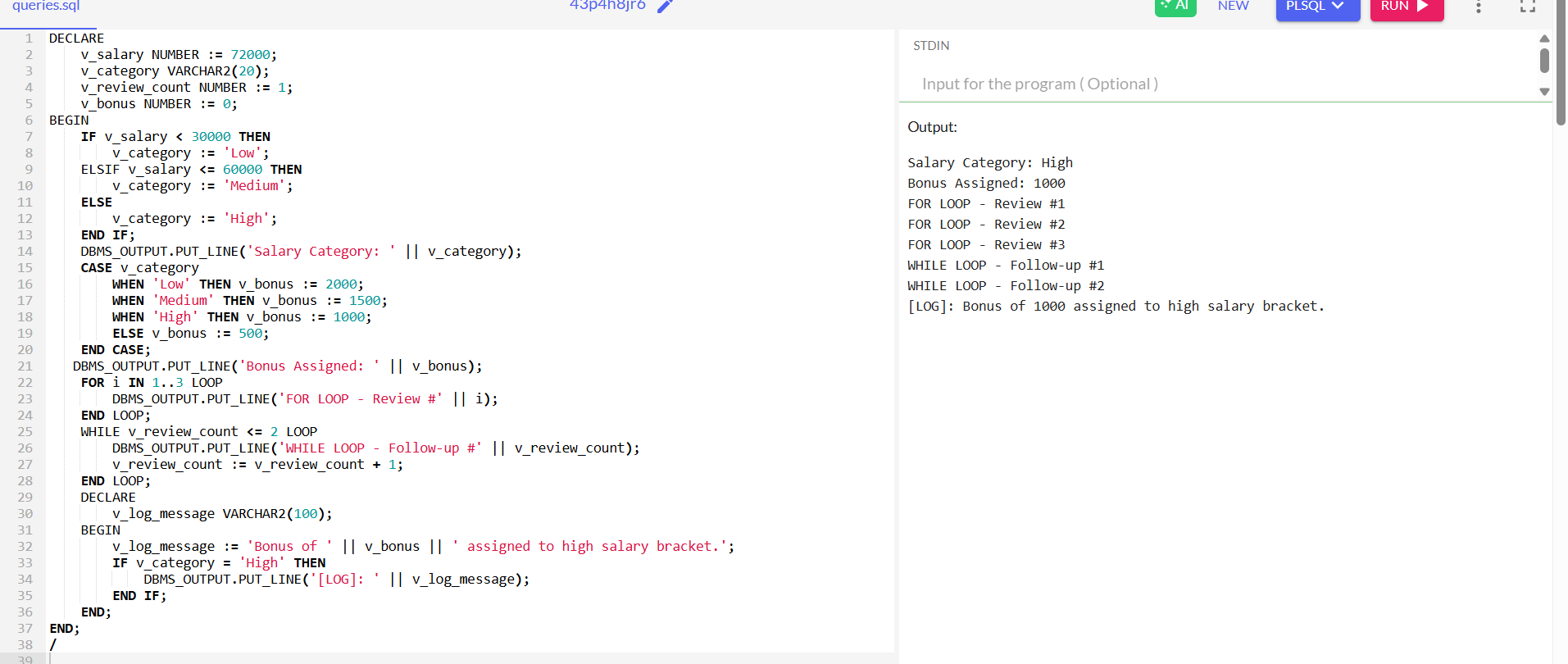
END IF;

END;

END;

/

**Output:**



**Exercise 3: Stored Procedures**

**Code:**

CREATE TABLE employees (

emp\_id NUMBER PRIMARY KEY,

emp\_name VARCHAR2(100),

salary NUMBER

);

INSERT INTO employees (emp\_id, emp\_name, salary) VALUES (101, 'Alice', 50000);

INSERT INTO employees (emp\_id, emp\_name, salary) VALUES (102, 'Bob', 60000);

COMMIT;

CREATE OR REPLACE PROCEDURE get\_employee\_details (

p\_emp\_id IN employees.emp\_id%TYPE,

p\_emp\_name OUT employees.emp\_name%TYPE,

p\_salary OUT employees.salary%TYPE

)

IS

BEGIN

SELECT emp\_name, salary

INTO p\_emp\_name, p\_salary

FROM employees

WHERE emp\_id = p\_emp\_id;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

p\_emp\_name := 'Not Found';

p\_salary := 0;

END;

/

DECLARE

v\_name employees.emp\_name%TYPE;

v\_salary employees.salary%TYPE;

BEGIN

get\_employee\_details(101, v\_name, v\_salary);

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

DBMS\_OUTPUT.PUT\_LINE('Salary: ' || v\_salary);

END;

/

**Output:**

