



# University Institute of Engineering

## Department of Computer Science & Engineering

### Experiment: 3

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**Branch: CSE**

**Section/Group: AIT-KRG-GP2**

**Semester: 4th**

**Date of Performance:7/01/28**

**Subject Name: DBMS**

- 1. Aim of the practical:** To understand the basic structure of a PL/SQL program by creating and executing a simple PL/SQL block that includes declaration and execution sections, and to display output using built-in procedures.

### 2. Tool Used:

- **Database Management System:**

- **Oracle Database**

### 3. Objective:

To create a simple PL/SQL program demonstrating Declaration Section and Execution Section.

### 4. Practical / Experimental Steps

Step 1: Open Oracle SQL\*Plus / SQL Developer and create a new SQL worksheet.

Step 2: Enable output display using the command: `SET SERVEROUTPUT ON.`



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- Step 3: Write the first PL/SQL block with a **DECLARE** section to define employee variables.
- Step 4: Execute the block using **BEGIN...END** and display values using `DBMS_OUTPUT.PUT_LINE`.
- Step 5: Run the second and third blocks to perform salary calculations and conditional tax bracket checks.
- Step 6: Observe and verify the output results shown in the output window for each PL/SQL block execution

### A. Declaration Section

DECLARE

```
emp_id    NUMBER := 101;  
  
emp_name  VARCHAR2(50) := 'John Doe';  
  
emp_salary NUMBER := 90000;
```

### B. Execution Section

```
BEGIN  
    DBMS_OUTPUT.PUT_LINE('Employee ID : ' || emp_id);  
    DBMS_OUTPUT.PUT_LINE('Employee Name : ' || emp_name);  
    DBMS_OUTPUT.PUT_LINE('Employee Salary : ' || emp_salary);  
END;  
/
```



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### 5. I / O Analysis

```
DECLARE
  emp_id   NUMBER := 101;
  emp_name VARCHAR2(50) := 'John Doe';
  emp_salary NUMBER := 90000;
BEGIN
  DBMS_OUTPUT.PUT_LINE('Employee ID : ' || emp_id);
  DBMS_OUTPUT.PUT_LINE('Employee Name : ' || emp_name);
  DBMS_OUTPUT.PUT_LINE('Employee Salary : ' || emp_salary);
  result := emp_salary * 0.01;
  DBMS_OUTPUT.PUT_LINE('10% of salary : ' || result);
END;
/
```

Output:

```
Employee ID : 101
Employee Name : John Doe
Employee Salary : 90000
10% of salary :900
```



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### 6. Learning outcomes (What I have learnt):

- Understood the basic structure of a PL/SQL block, including the **DECLARE** and **BEGIN...END** sections.
- Learned how to declare and initialize variables for storing data values.
- Gained knowledge of using `DBMS_OUTPUT.PUT_LINE` to display results during program execution.
- Practiced performing mathematical operations on variables within PL/SQL programs.
- Developed understanding of decision-making using **IF-ELSIF-ELSE** conditional statements.
- Acquired practical insight into how PL/SQL can be used for simple database-related computations and logic implementation.

-