



# University Institute of Engineering

## Department of Computer Science & Engineering

### Experiment: 3

**Student Name:** Habis Prakash Deka

**UID:**24BDA70031

**Branch:** CSE

**Section/Group:** AIT-KRG-G2

**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**

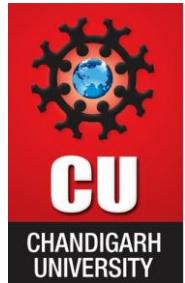
**3. Objective:**

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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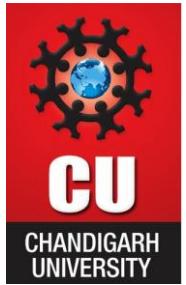
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### 5. I / O Analysis

```
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.

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