

Ex.No.: 11		PL SQL PROGRAMS
Date:		

Here are the PL/SQL programs as requested:

PROGRAM 1

****PL/SQL block to calculate the incentive of an employee whose ID is 110.****

```sql

DECLARE

    v\_employee\_id NUMBER := 110;

    v\_salary employees.salary%TYPE;

    v\_incentive NUMBER;

BEGIN

    SELECT salary INTO v\_salary FROM employees WHERE employee\_id = v\_employee\_id;

    v\_incentive := v\_salary \* 0.10; -- Assuming 10% incentive rate

    DBMS\_OUTPUT.PUT\_LINE('Incentive for employee ID ' || v\_employee\_id || ' is: ' ||

v\_incentive);

END;

/

```

PROGRAM 2

****PL/SQL block to show an invalid case-insensitive reference to a quoted and unquoted user-defined identifier.****

```sql

DECLARE

    "MyVariable" NUMBER := 100; -- Quoted identifier

    myvariable NUMBER := 200; -- Unquoted identifier

BEGIN

    DBMS\_OUTPUT.PUT\_LINE('Value of "MyVariable" is ' || "MyVariable");

    DBMS\_OUTPUT.PUT\_LINE('Value of myvariable is ' || myvariable);

    -- Uncommenting the next line will cause an error, as quoted and unquoted identifiers are treated differently.

```
-- DBMS_OUTPUT.PUT_LINE('This will cause an error: ' || MyVariable);
END;
/

```

#### ### PROGRAM 3

**\*\*PL/SQL block to adjust the salary of the employee whose ID is 122.\*\***

```
```sql
```

```
DECLARE
```

```
    v_employee_id NUMBER := 122;
```

```
    v_new_salary employees.salary%TYPE := 5500; -- New salary value
```

```
BEGIN
```

```
    UPDATE employees
```

```
    SET salary = v_new_salary
```

```
    WHERE employee_id = v_employee_id;
```

```
IF SQL%ROWCOUNT > 0 THEN
```

```
    DBMS_OUTPUT.PUT_LINE('Salary updated for employee ID ' || v_employee_id);
```

```
ELSE
```

```
    DBMS_OUTPUT.PUT_LINE('No employee found with ID ' || v_employee_id);
```

```
END IF;
```

```
END;
```

```
/
```

```
---
```

PROGRAM 4

****PL/SQL block to create a procedure using the `IS [NOT] NULL` operator and show `AND` operator returns `TRUE` if and only if both operands are `TRUE`.****

```
```sql
```

```
DECLARE
```

```
 v_value1 NUMBER := 10;
```

```
 v_value2 NUMBER := NULL;
```

```
BEGIN
```

```
 IF v_value1 IS NOT NULL AND v_value2 IS NOT NULL THEN
```

```
 DBMS_OUTPUT.PUT_LINE('Both values are NOT NULL');
```

```
 ELSE
```

```
 DBMS_OUTPUT.PUT_LINE('One or both values are NULL');
```

```
 END IF;
```

```
END;
```

```
/
```

```
...
```

```

```

#### ### PROGRAM 5

**\*\*PL/SQL block to describe the usage of the `LIKE` operator, including wildcard characters and escape character.\*\***

```
```sql
```

```
DECLARE
```

```
    v_name employees.last_name%TYPE := 'Smi%';
```

```
BEGIN
```

```
    FOR rec IN (SELECT last_name FROM employees WHERE last_name LIKE v_name  
ESCAPE '\') LOOP
```

```
        DBMS_OUTPUT.PUT_LINE('Employee Name: ' || rec.last_name);
```

```
    END LOOP;
```

```
END;
```

```
/
```

```
...
```

```
---
```

PROGRAM 6

****PL/SQL program to arrange the numbers of two variables so that the smaller number is stored in `num_small` and the larger in `num_large`.****

```
```sql
```

```
DECLARE
```

```
 num1 NUMBER := 45;
```

```
 num2 NUMBER := 30;
```

```
 num_small NUMBER;
```

```
 num_large NUMBER;
```

```
BEGIN
```

```
 IF num1 < num2 THEN
```

```
 num_small := num1;
```

```
 num_large := num2;
```

```
 ELSE
```

```
 num_small := num2;
```

```
 num_large := num1;
```

```
 END IF;
```

```
 DBMS_OUTPUT.PUT_LINE('Small Number: ' || num_small);
```

```
 DBMS_OUTPUT.PUT_LINE('Large Number: ' || num_large);
```

```
END;
```

```
/
```

```
...
```

---

## #### PROGRAM 7

**\*\*PL/SQL procedure to calculate the incentive on a target achieved and display a message indicating whether the record was updated.\*\***

```sql

```
CREATE OR REPLACE PROCEDURE calculate_incentive(p_employee_id NUMBER, p_target
NUMBER) AS
```

```
    v_incentive NUMBER;
```

```
BEGIN
```

```
    IF p_target >= 1000 THEN
```

```
        v_incentive := p_target * 0.05; -- Example incentive calculation
```

```
        DBMS_OUTPUT.PUT_LINE('Incentive calculated: ' || v_incentive);
```

```
        DBMS_OUTPUT.PUT_LINE('Record updated.');
```

```
    ELSE
```

```
        DBMS_OUTPUT.PUT_LINE('Target not achieved. No update.');
```

```
    END IF;
```

```
END calculate_incentive;
```

```
/
```

```

---

## #### PROGRAM 8

**\*\*PL/SQL procedure to calculate incentive achieved according to the specific sale limit.\*\***

```sql

```
CREATE OR REPLACE PROCEDURE calculate_sales_incentive(p_sales_amount NUMBER)
AS
```

```
    v_incentive NUMBER;
```

```
BEGIN
```

```
    IF p_sales_amount >= 5000 THEN
```

```
        v_incentive := p_sales_amount * 0.10;
```

```
    ELSIF p_sales_amount >= 3000 THEN
```

```
        v_incentive := p_sales_amount * 0.07;
```

```
    ELSE
```

```
        v_incentive := p_sales_amount * 0.05;
```

```
    END IF;
```

```
    DBMS_OUTPUT.PUT_LINE('Incentive achieved: ' || v_incentive);
```

```
END calculate_sales_incentive;
```

```
/
```

```

These PL/SQL blocks cover a range of tasks from variable handling, control structures, and conditional checks, to defining and using procedures with parameters.