

1. Write a procedure to display the name of employee getting highest salary.

```
--  
CREATE OR REPLACE PROCEDURE display_highest_salary_employee  
IS  
    v_highest_salary NUMBER;  
    v_employee_name VARCHAR2(50);  
BEGIN  
    -- Find the highest salary  
    SELECT MAX(sal) INTO v_highest_salary FROM emp;  
  
    -- Find the employee name with the highest salary  
    SELECT ename INTO v_employee_name  
    FROM emp  
    WHERE sal = v_highest_salary;  
  
    -- Display the result  
    DBMS_OUTPUT.PUT_LINE('Employee with the highest salary: ' || v_employee_name || '  
(Salary: ' || v_highest_salary || ')');  
END display_highest_salary_employee;  
/
```

2. Create a PL/SQL function named Get\_Name that accepts an employee number as input and returns the employee's name. Write a PL/SQL block to call this function and display the output.

```
CREATE OR REPLACE FUNCTION Get_Name(p_empno IN NUMBER)  
    RETURN VARCHAR2  
IS  
    v_ename VARCHAR2(50);  
BEGIN  
    -- Retrieve the employee name based on the employee number  
    SELECT ename INTO v_ename  
    FROM emp  
    WHERE empno = p_empno;  
  
    -- Return the employee name  
    RETURN v_ename;  
EXCEPTION  
    WHEN NO_DATA_FOUND THEN  
        RETURN NULL; -- Handle the case where the employee number is not found  
END Get_Name;  
/
```

-- PL/SQL block to call the function and display the output  
DECLARE

```

v_employee_number NUMBER := 7839; -- You can change this to the desired employee
number
v_employee_name VARCHAR2(50);
BEGIN
-- Call the function to get the employee name
v_employee_name := Get_Name(v_employee_number);

-- Display the result
IF v_employee_name IS NOT NULL THEN
    DBMS_OUTPUT.PUT_LINE('Employee Name for Employee ' || v_employee_number || ': '
|| v_employee_name);
ELSE
    DBMS_OUTPUT.PUT_LINE('Employee not found for Employee Number ' ||
v_employee_number);
END IF;
END;
/

```

3. Write a PL/SQL block to display the name of employee with salary and Department name, of any employee.(Assume: empno = 7839). Write Exception if no employee exists with the input empno.

```

DECLARE
v_empno NUMBER := 7839; -- Specify the desired employee number
v_ename VARCHAR2(50);
v_salary NUMBER;
v_dname VARCHAR2(50);
BEGIN
-- Retrieve employee details based on the employee number
SELECT e.ename, e.sal, d.dname
INTO v_ename, v_salary, v_dname
FROM emp e
JOIN dept d ON e.deptno = d.deptno
WHERE e.empno = v_empno;

-- Display the result
DBMS_OUTPUT.PUT_LINE('Employee Name: ' || v_ename);
DBMS_OUTPUT.PUT_LINE('Salary: ' || v_salary);
DBMS_OUTPUT.PUT_LINE('Department Name: ' || v_dname);
EXCEPTION
    WHEN NO_DATA_FOUND THEN
        DBMS_OUTPUT.PUT_LINE('No employee found for Employee Number ' || v_empno);
END;
/

```

4. Write a PL/SQL procedure to display the name of the employee who receives the highest salary in the EMP table.

```
CREATE OR REPLACE PROCEDURE Display_Highest_Salary_Employee
IS
    v_employee_name VARCHAR2(50);
    v_highest_salary NUMBER;
BEGIN
    -- Find the highest salary in the EMP table
    SELECT MAX(sal) INTO v_highest_salary FROM emp;

    -- Find the employee name(s) with the highest salary
    SELECT ename INTO v_employee_name
    FROM emp
    WHERE sal = v_highest_salary;

    -- Display the result
    IF v_employee_name IS NOT NULL THEN
        DBMS_OUTPUT.PUT_LINE('Employee(s) with the highest salary: ' || v_employee_name ||
        ' (Salary: ' || v_highest_salary || ')');
    ELSE
        DBMS_OUTPUT.PUT_LINE('No employee found in the EMP table.');
```

5. Develop a PL/SQL block to calculate and display the average salary for employees in a specific department (e.g., DEPTNO = 10).

```
DECLARE
    v_department_number NUMBER := 10; -- Specify the desired department number
    v_avg_salary NUMBER;
BEGIN
    -- Calculate the average salary for employees in the specified department
    SELECT AVG(sal) INTO v_avg_salary
    FROM emp
    WHERE deptno = v_department_number;

    -- Display the result
    IF v_avg_salary IS NOT NULL THEN
```

```

        DBMS_OUTPUT.PUT_LINE('Average Salary for Department ' || v_department_number ||
': ' || TO_CHAR(v_avg_salary, '99999.99'));
    ELSE
        DBMS_OUTPUT.PUT_LINE('No employees found for Department ' ||
v_department_number);
    END IF;
END;
/

```

6. Write a PL/SQL block to update the salary of an employee (e.g., empno = 7369) by a specified percentage (e.g., 10%). Display the updated salary and the original salary.

```

DECLARE
    v_employee_number NUMBER := 7369; -- Specify the desired employee number
    v_percentage_increase NUMBER := 10; -- Specify the desired percentage increase
    v_original_salary NUMBER;
    v_updated_salary NUMBER;
BEGIN
    -- Retrieve the original salary
    SELECT sal INTO v_original_salary
    FROM emp
    WHERE empno = v_employee_number;

    -- Update the salary by the specified percentage
    v_updated_salary := v_original_salary + (v_original_salary * v_percentage_increase / 100);

    -- Update the salary in the EMP table
    UPDATE emp
    SET sal = v_updated_salary
    WHERE empno = v_employee_number;

    -- Display the result
    DBMS_OUTPUT.PUT_LINE('Employee Number: ' || v_employee_number);
    DBMS_OUTPUT.PUT_LINE('Original Salary: ' || TO_CHAR(v_original_salary, '99999.99'));
    DBMS_OUTPUT.PUT_LINE('Updated Salary: ' || TO_CHAR(v_updated_salary, '99999.99'));
END;
/

```

7. Create a PL/SQL procedure that takes a department number as input and displays the details (Empno, Ename, Salary) of all employees in that department.

```

CREATE OR REPLACE PROCEDURE
Display_Employees_In_Department(p_department_number IN NUMBER)
IS
BEGIN
    -- Display the details of employees in the specified department
    FOR emp_record IN (SELECT empno, ename, sal
                        FROM emp
                        WHERE deptno = p_department_number)
    LOOP
        DBMS_OUTPUT.PUT_LINE('Employee Number: ' || emp_record.empno);
        DBMS_OUTPUT.PUT_LINE('Employee Name: ' || emp_record.ename);
        DBMS_OUTPUT.PUT_LINE('Salary: ' || TO_CHAR(emp_record.sal, '99999.99'));
        DBMS_OUTPUT.PUT_LINE('-----');
    END LOOP;

    -- Check if any employees were found in the specified department
    IF SQL%NOTFOUND THEN
        DBMS_OUTPUT.PUT_LINE('No employees found for Department ' ||
p_department_number);
    END IF;
END Display_Employees_In_Department;
/

```

8. Write a PL/SQL block to calculate and display the count of employees in a specific department.  
Allow the department number to be a parameter in your block.

```

DECLARE
    v_department_number NUMBER := 20; -- Specify the desired department number
    v_employee_count NUMBER;
BEGIN
    -- Calculate the count of employees in the specified department
    SELECT COUNT(*) INTO v_employee_count
    FROM emp
    WHERE deptno = v_department_number;

    -- Display the result
    DBMS_OUTPUT.PUT_LINE('Employee Count for Department ' || v_department_number ||
': ' || v_employee_count);
END;
/

```

9. Create a PL/SQL function named Get\_Avg\_Salary () that calculates and returns the average

salary of all employees in a given department. Write a PL/SQL block to call this function with a specific DEPTNO and display the result.

```
CREATE OR REPLACE FUNCTION Get_Avg_Salary(p_department_number IN NUMBER)
  RETURN NUMBER
IS
  v_avg_salary NUMBER;
BEGIN
  -- Calculate the average salary for employees in the specified department
  SELECT AVG(sal) INTO v_avg_salary
  FROM emp
  WHERE deptno = p_department_number;

  -- Return the result
  RETURN v_avg_salary;
END Get_Avg_Salary;
/
```

-- PL/SQL block to call the function and display the result

```
DECLARE
  v_department_number NUMBER := 30; -- Specify the desired department number
  v_result_avg_salary NUMBER;
BEGIN
  -- Call the function to get the average salary
  v_result_avg_salary := Get_Avg_Salary(v_department_number);

  -- Display the result
  IF v_result_avg_salary IS NOT NULL THEN
    DBMS_OUTPUT.PUT_LINE('Average Salary for Department ' || v_department_number ||
  ': ' || TO_CHAR(v_result_avg_salary, '99999.99'));
  ELSE
    DBMS_OUTPUT.PUT_LINE('No employees found for Department ' ||
  v_department_number);
  END IF;
END;
/
```

10. Develop a PL/SQL procedure that takes a DEPTNO as input and displays information about the department, including the department name, location, and the count of employees in that department. Write a PL/SQL block to execute this procedure for a specified DEPTNO.

```
CREATE OR REPLACE PROCEDURE Display_Department_Info(p_deptno IN NUMBER)
IS
  v_department_name VARCHAR2(50);
  v_location VARCHAR2(50);
```

```

    v_employee_count NUMBER;
BEGIN
    -- Retrieve department information and employee count
    SELECT d.dname, d.loc, COUNT(e.empno)
    INTO v_department_name, v_location, v_employee_count
    FROM dept d
    LEFT JOIN emp e ON d.deptno = e.deptno
    WHERE d.deptno = p_deptno
    GROUP BY d.dname, d.loc;

    -- Display the result
    DBMS_OUTPUT.PUT_LINE('Department Name: ' || v_department_name);
    DBMS_OUTPUT.PUT_LINE('Location: ' || v_location);
    DBMS_OUTPUT.PUT_LINE('Employee Count: ' || v_employee_count);
END Display_Department_Info;
/

-- PL/SQL block to execute the procedure
DECLARE
    v_deptno NUMBER := 20; -- Specify the desired department number
BEGIN
    Display_Department_Info(v_deptno);
END;
/

```