

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



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Experiment - 3.1 (Medium)

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Branch: BE-CSE

Semester : 5th

Date of Performance : 22-Aug-2025

Subject Name: ADBMS

Subject- Code : 23CSP - 333

Problem Title - Department Salary Champions

1. Aim:

In a bustling corporate organization, each department strives to retain the most talented (and well-compensated) employees.

You have access to two key records: **one lists every employee along with their salary and department, while the other details the names of each department.** Your task is to identify the **top earners in every department.**

If multiple employees share the same highest salary within a department, all of them should be celebrated equally.

The final result should present the **department name, employee name, and salary of these top-tier professionals** arranged by department.

2. Objective:

- To understand how to use the subqueries.

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3. Code:

-- Create Departments table

```
CREATE TABLE Departments (  
    DepartmentID INT PRIMARY KEY,  
    DepartmentName VARCHAR(50)  
);
```

-- Insert data into Departments

```
INSERT INTO Departments (DepartmentID, DepartmentName) VALUES  
(1, 'Engineering'),  
(2, 'Marketing'),  
(3, 'Human Resources');
```

-- Create Employees table

```
CREATE TABLE Employees (  
    EmployeeID INT PRIMARY KEY,  
    EmployeeName VARCHAR(50),  
    Salary INT,  
    DepartmentID INT,  
    FOREIGN KEY (DepartmentID) REFERENCES  
Departments(DepartmentID)  
);
```

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-- Insert data into Employees with Indian names

```
INSERT INTO Employees (EmployeeID, EmployeeName, Salary,
DepartmentID) VALUES
(1, 'Amit', 90000, 1),
(2, 'Rahul', 120000, 1),
(3, 'Priya', 120000, 1),
(4, 'Sneha', 85000, 2),
(5, 'Kiran', 95000, 2),
(6, 'Anjali', 120000, 3),
(7, 'Rohit', 115000, 3),
(8, 'Neha', 115000, 3);
```

-- Query to find top earners per department using subquery

```
SELECT
    d.DepartmentName,
    e.EmployeeName,
    e.Salary
FROM
    Employees e
JOIN
    Departments d ON e.DepartmentID = d.DepartmentID
WHERE
    e.Salary = (
        SELECT MAX(e2.Salary)
        FROM Employees e2
        WHERE e2.DepartmentID = e.DepartmentID
```

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)
ORDER BY
d.DepartmentName,
e.EmployeeName;

4. OUTPUT:

Results		Messages		
	ID	NAME	SALARY	DEPT_ID
1	1	JOE	70000	1
2	2	JIM	90000	1
3	3	HENRY	80000	2
4	4	SAM	60000	2
5	5	MAX	90000	1

	ID	DEPT_NAME
1	1	IT
2	2	SALES

	DEPT_NAME	NAME	SALARY
1	SALES	HENRY	80000
2	IT	MAX	90000
3	IT	JIM	90000