



EXPERIMENT - 3

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Branch: BE-CSE

Semester: 5th

Subject Name: ADBMS

UID: 23BCS10258

Section/Group: KRG_1-B

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Subject Code: 23CSP-333

1. Aim: --- Medium Level Problem ---

a) **Department Salary Champions**

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.

Input Table: **Employee**

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

Department

ID	DEPT_NAME
1	IT
2	SALES

--- Hard Level Problem ---

b) **Merging Employee Histories: Who Earned Least?**

Two legacy HR systems (A and B) have separate records of employee salaries. These records may overlap. Management wants to **merge these datasets** and identify **each unique employee** (by EmpID) along with their **lowest recorded salary** across both systems.

Objective

1. Combine two tables A and B.
2. Return each EmpID with their **lowest salary**, and the corresponding **Ename**.

Table A

EmpID	Ename	Salary
1	AA	1000
2	BB	300

Table B

EmpID	Ename	Salary
2	BB	400
3	CC	100



2. Platform Used:

Microsoft SQL Server Management Studio

3. SQL Code:

```
a) CREATE TABLE Department (  
    ID INT PRIMARY KEY,  
    DEPT_NAME VARCHAR(50)  
);  
CREATE TABLE Employee (  
    ID INT,  
    NAME VARCHAR(50),  
    SALARY INT,  
    DEPT_ID INT,  
    FOREIGN KEY (DEPT_ID) REFERENCES Department(ID)  
);
```

```
INSERT INTO Department (ID, DEPT_NAME) VALUES  
(1, 'IT'),  
(2, 'SALES');
```

```
INSERT INTO Employee (ID, NAME, SALARY, DEPT_ID) VALUES  
(1, 'JOE', 70000, 1),  
(2, 'JIM', 90000, 1),  
(3, 'HENRY', 80000, 2),  
(4, 'SAM', 60000, 2),  
(5, 'MAX', 90000, 1);
```

```
SELECT d.DEPT_NAME, e.NAME, e.SALARY FROM Department as d  
INNER JOIN Employee as e  
ON d.id = e.DEPT_ID  
WHERE e.SALARY IN  
(  
    SELECT MAX(E2.SALARY)  
    FROM Employee as E2  
    where E2.DEPT_ID = e.DEPT_ID  
)  
ORDER by d.DEPT_NAME
```



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```
b) CREATE TABLE A (  
    EmpID INT PRIMARY KEY,  
    Ename VARCHAR(50),  
    salary INT  
);
```

```
CREATE TABLE B (  
    EmpID INT PRIMARY KEY,  
    Ename VARCHAR(50),  
    salary INT  
);
```

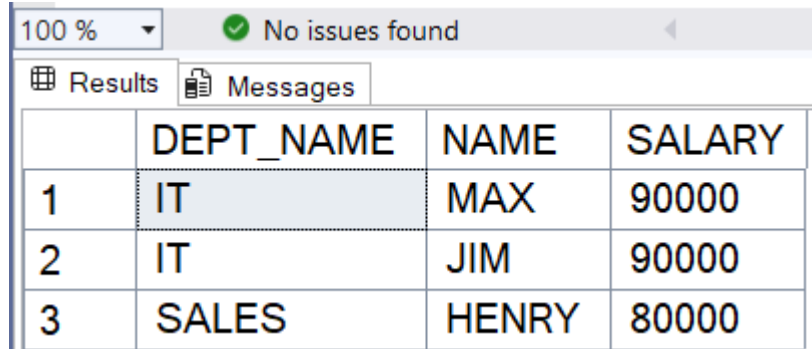
```
INSERT INTO A (EmpID, Ename, salary) VALUES  
(1, 'AA', 1000),  
(2, 'BB', 300);
```

```
INSERT INTO B (EmpID, Ename, salary) VALUES  
(2, 'BB', 400),  
(3, 'CC', 100);
```

```
SELECT EmpID, Ename, MIN(salary) as salary  
FROM  
(SELECT * from A  
UNION ALL  
SELECT * FROM B)  
As INTERMEDIATE_RESULT  
GROUP BY EmpID, Ename
```

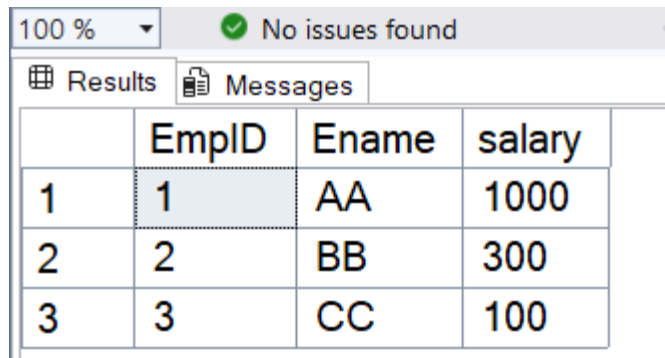
4. Output:

a)



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

b)



	EmpID	Ename	salary
1	1	AA	1000
2	2	BB	300
3	3	CC	100