Experiment 3

Student Name: Aryan Anthwal   UID: 23BCS13302
Branch: BE-CSE   Section/Group: Krg-3A
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Aim: **EASY**

PS: YOU ARE GIVEN WITH EMPLOYEE RELATION HAVING ONLY ONE ATTRIBUTE NAMED AS EMP_ID. YOUR TASK IS TO FETCH THE MAXIMUM EMP_ID, BUT EXCLUDING THE DUPLICATE VALUES.

INPUT: EMPLOYEE (EMP_ID)
2
4
4
6
6
7
8
8
8

OUTPUT: 7

Code:

```
CREATE TABLE EMPLOYEE(
EMP_ID INT
);

INSERT INTO EMPLOYEE
VALUES
(2),
(4),
(4),
(6),
(7),
(8),
(8),
(8);
```

```
SELECT MAX(EMP_ID) FROM EMPLOYEES WHERE EMP_ID
NOT IN
(SELECT EMP_ID FROM EMPLOYEE
GROUP BY EMP_ID
HAVING COUNT(EMP_ID) > 1 )--4,6,8
```

Output:

DEPARTMENT SALARY CHAMPIONS (MEDIUM)

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.

Code:

```
-- Create Department Table
CREATE TABLE department_new (
    id INT PRIMARY KEY,
    dept_name VARCHAR(50)
);
```

```
-- Create Employee Table

CREATE TABLE employee_new (
    id INT,
    name VARCHAR(50),
    salary INT,
    department_id INT,
    FOREIGN KEY (department_id) REFERENCES department_new(id)
);

-- Insert into Department Table
INSERT INTO department_new (id, dept_name) VALUES
(1, 'IT'),
(2, 'SALES');

-- Insert into Employee Table
INSERT INTO employee_new (id, name , salary, department_id) VALUES
(1, 'JOE', 70000, 1),
(2, 'JIM', 90000, 1),
(3, 'HENRY', 80000, 2),
(4, 'SAM', 60000, 2),
(5, 'MAX', 90000, 1);

-- CO RELATED SUB QUERY

SELECT D.DEPT_NAME,E.NAME, E.SALARY
FROM Employee_new as E
INNER JOIN
Department_new as D
ON E.department_id=D.id
WHERE E.SALARY IN   -- 90000
(
    SELECT MAX(SALARY)
    FROM employee_new
    WHERE department_id = E.department_id   -- 90000
)

ORDER BY D.dept_name;
```
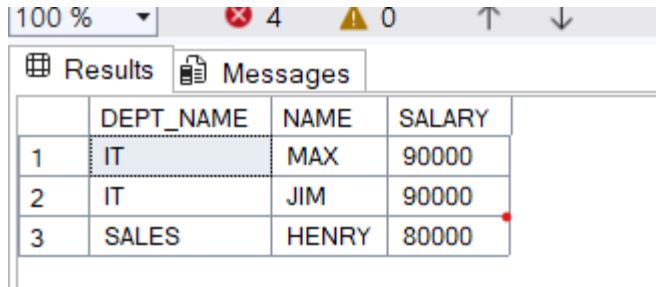
Output:

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

MERGING EMPLOYEE HISTORY: WHO EARNED LEAST? (HARD)

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.

Code:

```
CREATE TABLE A(
EMPID INT,
ENAME VARCHAR(20),
Salary INT
);

CREATE TABLE B(
EMPID INT,
ENAME VARCHAR(20),
Salary INT
);

INSERT INTO A
VALUES
(1,'AA', 1000),
(2, 'BB', 300);

INSERT INTO B
```

```
VALUES
(2,'BB', 400),
(3, 'CC', 100);



SELECT * FROM A
UNION ALL    -- HERE, WE CAN ALSO USE UNION
SELECT * FROM B
WHERE SALARY IN
(SELECT MIN(SALARY) FROM B);
```

Output:

	EMPID	ENAME	Salary
1	1	AA	1000
2	2	BB	300
3	3	CC	100