184. Department Highest Salary

July 11, 2017 | 63.5K views

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6 9 6

The Employee table holds all employees. Every employee has an Id, a salary, and there is also a column for the department Id.

```
Id Name | Salary | DepartmentId |
| 1 | Joe | 70000 | 1
2 | Jim | 90000 | 1
| 3 | Henry | 80000 | 2
4 | Sam | 60000 | 2
5 | Max | 90000 | 1
```

The Department table holds all departments of the company.

```
Id Name
 +----+
 | 1 | IT |
 2 Sales
 +----+
Write a SQL query to find employees who have the highest salary in each of the departments. For the above
```

tables, your SQL query should return the following rows (order of rows does not matter).

```
| Department | Employee | Salary |
    Max 90000
 IT
    | Jim | 90000 |
 IT
 Sales Henry 80000
Explanation:
```

department.

Max and Jim both have the highest salary in the IT department and Henry has the highest salary in the Sales

Approach: Using JOIN and IN clause [Accepted]

Solution

```
Algorithm
```

in a department.

SELECT

FROM

Salary

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from employee

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the employee name information in this query."

Department.name AS 'Department',

Employee.name AS 'Employee',

SELECT DepartmentId, MAX(Salary)

Since the Employee table contains the Salary and DepartmentId information, we can query the highest salary

```
FROM
     Employee
GROUP BY DepartmentId;
   Note: There might be multiple employees having the same highest salary, so it is safe not to include
   the employee name information in this query.
```

DepartmentId | MAX(Salary) 90000 2 80000

```
Then, we can join table Employee and Department, and query the (DepartmentId, Salary) are in the temp
table using IN statement as below.
MySQL
```

```
Employee
   Department ON Employee.DepartmentId = Department.Id
WHERE
    (Employee.DepartmentId , Salary) IN
       SELECT
            DepartmentId, MAX(Salary)
       FROM
           Employee
       GROUP BY DepartmentId
 Department | Employee | Salary
                         80000
             Henry
IT
             Max
                         90000
```

```
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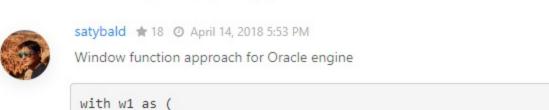
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Not only that, but when you group by departmentId, the maximum salary is returned with a wrong



Write your MySQL query statement



select d.Name as Department, e.Name as Employee, e.Salary

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select b.name as Department, a.Employee, a.salary as Salary	
from	
(select name as Employee, DepartmentId, salary, rank() over (partition b	by Departmentld order by salary
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select rank() over (partition by DepartmentId order by Salary desc) rank,

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