# 184. Department Highest Salary

July 11, 2017 | 69K views

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**f y in** 

the department Id.

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

```
Salary | DepartmentId
         Name
                 70000
         Joe
                 90000
         Jim
        Henry
                 80000
         Sam
                 60000
                 90000
         Max
The Department table holds all departments of the company.
```

```
Name
          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
       | Jim | 90000
   IT
         Henry
                          80000
   Sales
Explanation:
Max and Jim both have the highest salary in the IT department and Henry has the highest salary in the Sales
```

department.

## Approach: Using JOIN and IN clause [Accepted]

Algorithm

Solution

Since the **Employee** table contains the *Salary* and *DepartmentId* information, we can query the highest salary in a department.

Employee

DepartmentId | MAX(Salary)

table using IN statement as below.

90000

80000

Department.name AS 'Department',

Employee.name AS 'Employee',

SELECT DepartmentId, MAX(Salary) FROM

```
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.
```

MySQL

Then, we can join table **Employee** and **Department**, and query the (DepartmentId, Salary) are in the temp

## Salary FROM

Employee

JOIN

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FROM

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SELECT

2

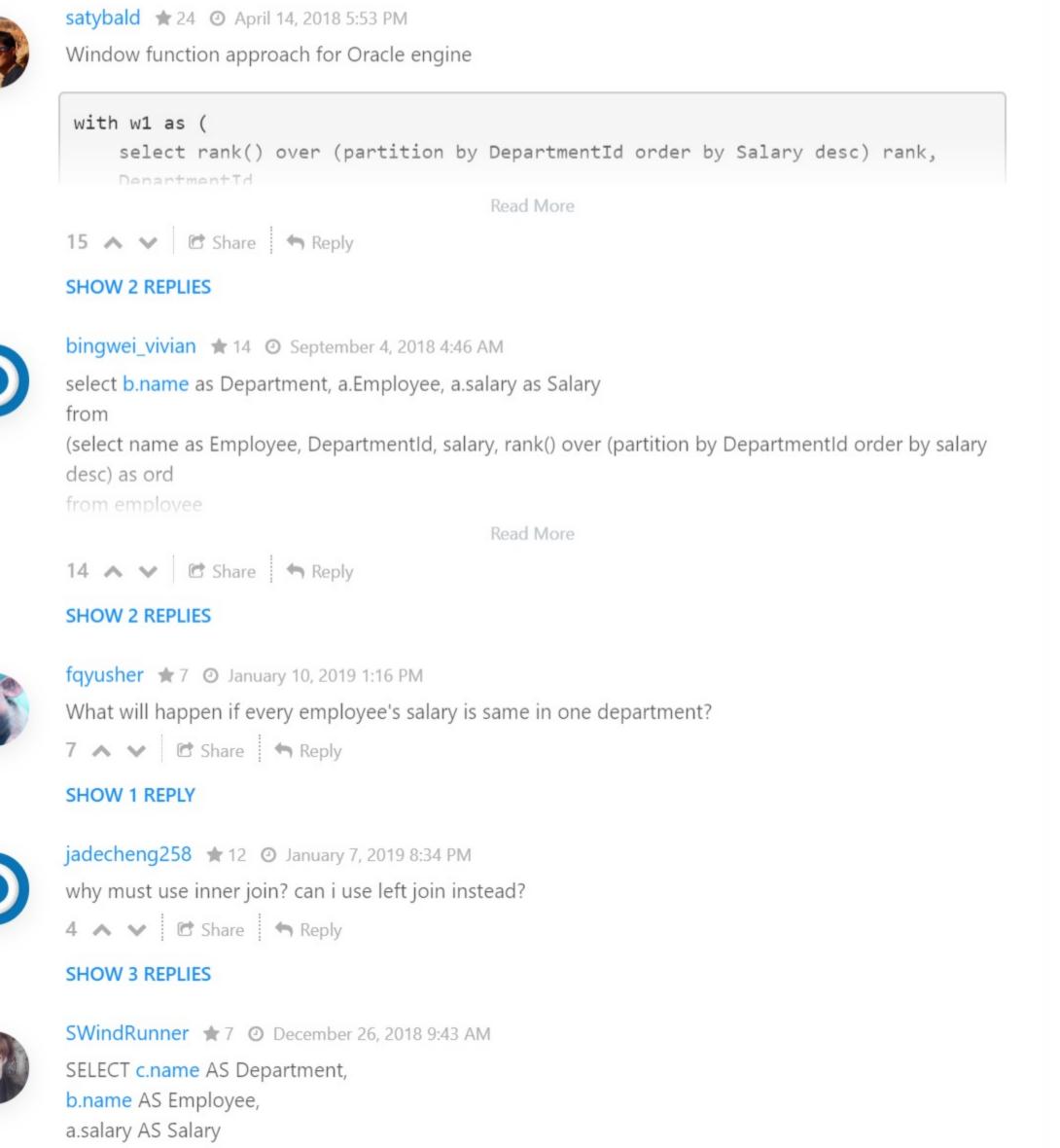
```
Department ON Employee.DepartmentId = Department.Id
WHERE
    (Employee.DepartmentId , Salary) IN
        SELECT
            DepartmentId, MAX(Salary)
        FROM
            Employee
        GROUP BY DepartmentId
  Department | Employee | Salary
 Sales
              Henry
                     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

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