

Problem 185: Department Top Three Salaries

Problem Information

Difficulty: **Hard**

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Table:

Employee

+-----+-----+ | Column Name | Type | +-----+-----+ | id | int | | name | varchar |
| | salary | int | | departmentId | int | +-----+-----+ id is the primary key (column with
unique values) for this table. departmentId is a foreign key (reference column) of the ID from
the

Department

table. Each row of this table indicates the ID, name, and salary of an employee. It also
contains the ID of their department.

Table:

Department

+-----+-----+ | Column Name | Type | +-----+-----+ | id | int | | name | varchar |
+-----+-----+ id is the primary key (column with unique values) for this table. Each row
of this table indicates the ID of a department and its name.

A company's executives are interested in seeing who earns the most money in each of the
company's departments. A

high earner

in a department is an employee who has a salary in the

top three unique

salaries for that department.

Write a solution to find the employees who are

high earners

in each of the departments.

Return the result table

in any order

.

The result format is in the following example.

Example 1:

Input:

Employee table: +----+-----+-----+-----+ | id | name | salary | departmentId |
+----+-----+-----+-----+ | 1 | Joe | 85000 | 1 | | 2 | Henry | 80000 | 2 | | 3 | Sam | 60000
| 2 | | 4 | Max | 90000 | 1 | | 5 | Janet | 69000 | 1 | | 6 | Randy | 85000 | 1 | | 7 | Will | 70000 | 1 |
+----+-----+-----+-----+ Department table: +----+-----+ | id | name | +----+-----+ | 1 |
IT | | 2 | Sales | +----+-----+

Output:

+-----+-----+-----+ | Department | Employee | Salary | +-----+-----+-----+ |
IT | Max | 90000 | | IT | Joe | 85000 | | IT | Randy | 85000 | | IT | Will | 70000 | | Sales | Henry |
80000 | | Sales | Sam | 60000 | +-----+-----+-----+

Explanation:

In the IT department: - Max earns the highest unique salary - Both Randy and Joe earn the second-highest unique salary - Will earns the third-highest unique salary

In the Sales department: - Henry earns the highest salary - Sam earns the second-highest salary - There is no third-highest salary as there are only two employees

Constraints:

There are no employees with the

exact

same name, salary

and

department.

Code Snippets

MySQL:

```
# Write your MySQL query statement below
```

MS SQL Server:

```
/* Write your T-SQL query statement below */
```

PostgreSQL:

```
-- Write your PostgreSQL query statement below
```

Oracle:

```
/* Write your PL/SQL query statement below */
```

Pandas:

```
import pandas as pd
```

```
def top_three_salaries(employee: pd.DataFrame, department: pd.DataFrame) ->
pd.DataFrame:
```

Solutions

MySQL Solution:

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