

Problem 3338: Second Highest Salary II

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Table:

employees

+-----+-----+ | Column Name | Type | +-----+-----+ | emp_id | int | | salary | int | | dept | varchar | +-----+-----+ emp_id is the unique key for this table. Each row of this table contains information about an employee including their ID, salary, and department.

Write a solution to find the employees who earn the

second-highest salary

in each department. If

multiple employees have the second-highest salary

,

include

all employees

with

that salary

.

Return

the result table

ordered by

emp_id

in

ascending

order

.

The result format is in the following example.

Example:

Input:

employees table:

```
+-----+-----+-----+ | emp_id | salary | dept | +-----+-----+-----+ | 1 | 70000 |  
Sales | | 2 | 80000 | Sales | | 3 | 80000 | Sales | | 4 | 90000 | Sales | | 5 | 55000 | IT | | 6 | 65000  
| IT | | 7 | 65000 | IT | | 8 | 50000 | Marketing | | 9 | 55000 | Marketing | | 10 | 55000 | HR |  
+-----+-----+-----+
```

Output:

```
+-----+-----+ | emp_id | dept | +-----+-----+ | 2 | Sales | | 3 | Sales | | 5 | IT | | 8 |  
Marketing | +-----+-----+
```

Explanation:

Sales Department

:

Highest salary is 90000 (emp_id: 4)

Second-highest salary is 80000 (emp_id: 2, 3)

Both employees with salary 80000 are included

IT Department

:

Highest salary is 65000 (emp_id: 6, 7)

Second-highest salary is 55000 (emp_id: 5)

Only emp_id 5 is included as they have the second-highest salary

Marketing Department

:

Highest salary is 55000 (emp_id: 9)

Second-highest salary is 50000 (emp_id: 8)

Employee 8 is included

HR Department

:

Only has one employee

Not included in the result as it has fewer than 2 employees

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 find_second_highest_salary(employees: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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