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Code

Pandas • Auto

```python
import pandas as pd

def median_employee_salary(employee: pd.DataFrame) -> pd.DataFrame:

    employee['rank_asc'] = employee.sort_values(['salary','id'], ascending = [True,True]).groupby('company')['salary'].rank(method='first',ascending=True)
    employee['rank_des'] = employee.sort_values(['salary','id'], ascending = [False,False]).groupby('company')['salary'].rank(method='first',ascending=False)

    df = employee[abs(employee.rank_asc - employee.rank_des) <=1]

    return df[['id','company','salary']]
```

Saved   Ln 10, Col 41

Testcase   >_ Test Result

Accepted   Runtime: 268 ms

✅ Case 1

Input

```
Employee =
| id | company | salary |
| -- | ------- | ------ |
| 1  | A       | 2341   |
| 2  | A       | 341    |
| 3  | A       | 15     |
| 4  | A       | 15314  |
```

569. Median Employee Salary `Premium`   Solved ✓

`Hard`   `Topics`   `Companies`   `Hint`

SQL Schema >   Pandas Schema >
Table: `Employee`

```
+-------------+---------+
| Column Name | Type    |
+-------------+---------+
| id          | int     |
| company     | varchar |
| salary      | int     |
+-------------+---------+
```
id is the primary key (column with unique values) for this table.
Each row of this table indicates the company and the salary of one employee.

Write a solution to find the rows that contain the median salary of each company. While calculating the median, when you sort the salaries of the company, break the ties by `id`.

Return the result table in **any order**.

The result format is in the following example.

Example 1:

Input:
Employee table:
```
+----+---------+--------+
| id | company | salary |
+----+---------+--------+
| 1  | A       | 2341   |
| 2  | A       | 341    |
| 3  | A       | 15     |
| 4  | A       | 15314  |
| 5  | A       | 451    |
| 6  | A       | 513    |
| 7  | B       | 15     |
| 8  | B       | 13     |
| 9  | B       | 1154   |
| 10 | B       | 1345   |
| 11 | B       | 1221   |
| 12 | B       | 234    |
| 13 | C       | 2345   |
| 14 | C       | 2645   |
| 15 | C       | 2645   |
| 16 | C       | 2652   |
| 17 | C       | 65     |
+----+---------+--------+
```
Output:
```
+----+---------+--------+
| id | company | salary |
+----+---------+--------+
| 5  | A       | 451    |
| 6  | A       | 513    |
| 12 | B       | 234    |
| 9  | B       | 1154   |
| 14 | C       | 2645   |
+----+---------+--------+
```
Explanation:
For company A, the rows sorted are as follows:
```
+----+---------+--------+
| id | company | salary |
+----+---------+--------+
| 3  | A       | 15     |
| 2  | A       | 341    |
| 5  | A       | 451    | <-- median
| 6  | A       | 513    | <-- median
| 1  | A       | 2341   |
| 4  | A       | 15314  |
+----+---------+--------+
```
For company B, the rows sorted are as follows:
```
+----+---------+--------+
| id | company | salary |
+----+---------+--------+
| 8  | B       | 13     |
| 7  | B       | 15     |
| 12 | B       | 234    | <-- median
| 11 | B       | 1221   | <-- median
| 9  | B       | 1154   |
| 10 | B       | 1345   |
+----+---------+--------+
```
For company C, the rows sorted are as follows:
```
+----+---------+--------+
| id | company | salary |
+----+---------+--------+
| 17 | C       | 65     |
| 13 | C       | 2345   |
| 14 | C       | 2645   | <-- median
| 15 | C       | 2645   |
| 16 | C       | 2652   |
+----+---------+--------+
```

Follow up: Could you solve it without using any built-in or window functions?

Seen this question in a real interview before?   1/5
Yes   No

Accepted **49,367** /74.8K | Acceptance Rate **66.0**%

🏷 Topics

📇 Companies

💡 Hint 1

💡 Hint 2

💡 Hint 3

Discussion (25)

```
| 5  | A   | 451  |
| 6  | A   | 513  |
```