

Problem 2984: Find Peak Calling Hours for Each City

Problem Information

Difficulty: Medium
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

Table:

Calls

+-----+-----+ | Column Name | Type | +-----+-----+ | caller_id | int | |
recipient_id | int | | call_time | datetime | | city | varchar | +-----+-----+ (caller_id,
recipient_id, call_time) is the primary key (combination of columns with unique values) for this
table. Each row contains caller id, recipient id, call time, and city.

Write a solution to find the

peak

calling

hour

for each

city

. If

multiple hours

have the
same
number of calls, all of those hours will be recognized as
peak hours
for that specific city.

Return
the result table ordered by
peak calling hour
and
city
in
descending
order.

The result format is in the following example.

Example 1:

Input:

```
Calls table: +-----+-----+-----+-----+ | caller_id | recipient_id |
call_time | city | +-----+-----+-----+-----+ | 8 | 4 | 2021-08-24 22:46:07
| Houston | | 4 | 8 | 2021-08-24 22:57:13 | Houston | | 5 | 1 | 2021-08-11 21:28:44 | Houston | |
8 | 3 | 2021-08-17 22:04:15 | Houston | | 11 | 3 | 2021-08-17 13:07:00 | New York | | 8 | 11 |
2021-08-17 14:22:22 | New York | +-----+-----+-----+-----+
```

Output:

```

+-----+-----+-----+ | city | peak_calling_hour | number_of_calls |
+-----+-----+-----+ | Houston | 22 | 3 | | New York | 14 | 1 | | New York |
13 | 1 | +-----+-----+-----+

```

Explanation:

For Houston: - The peak time is 22:00, with a total of 3 calls recorded. For New York: - Both 13:00 and 14:00 hours have equal call counts of 1, so both times are considered peak hours. Output table is ordered by peak_calling_hour and city in descending order.

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 peak_calling_hours(calls: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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