

Problem 2494: Merge Overlapping Events in the Same Hall

Problem Information

Difficulty: Hard

Acceptance Rate: 36.43%

Paid Only: Yes

Tags: Database

Problem Description

Table: `HallEvents`

+-----+-----+ | Column Name | Type | +-----+-----+ | hall_id | int | | start_day | date |
| end_day | date | +-----+-----+ This table may contain duplicates rows. Each row of this
table indicates the start day and end day of an event and the hall in which the event is held.

Write a solution to merge all the overlapping events that are held **in the same hall**. Two
events overlap if they have **at least one day** in common.

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

The result format is in the following example.

Example 1:

Input: HallEvents table: +-----+-----+-----+ | hall_id | start_day | end_day |
+-----+-----+-----+ | 1 | 2023-01-13 | 2023-01-14 | | 1 | 2023-01-14 | 2023-01-17 ||
1 | 2023-01-18 | 2023-01-25 | | 2 | 2022-12-09 | 2022-12-23 | | 2 | 2022-12-13 | 2022-12-17 ||
3 | 2022-12-01 | 2023-01-30 | +-----+-----+-----+ **Output:**
+-----+-----+-----+ | hall_id | start_day | end_day | +-----+-----+-----+ |
1 | 2023-01-13 | 2023-01-17 | | 1 | 2023-01-18 | 2023-01-25 | | 2 | 2022-12-09 | 2022-12-23 | |
3 | 2022-12-01 | 2023-01-30 | +-----+-----+-----+ **Explanation:** There are three
halls. Hall 1: - The two events ["2023-01-13", "2023-01-14"] and ["2023-01-14", "2023-01-17"]
overlap. We merge them in one event ["2023-01-13", "2023-01-17"]. - The event
["2023-01-18", "2023-01-25"] does not overlap with any other event, so we leave it as it is. Hall

2: - The two events ["2022-12-09", "2022-12-23"] and ["2022-12-13", "2022-12-17"] overlap. We merge them in one event ["2022-12-09", "2022-12-23"]. Hall 3: - The hall has only one event, so we return it. Note that we only consider the events of each hall separately.

Code Snippets

MySQL:

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

MS SQL Server:

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

Oracle:

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