Problem 3140: Consecutive Available Seats II

Problem Information

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

Problem Description

Table:

Cinema

+-------------+------+ | Column Name | Type | +-------------+------+ | seat_id | int | | free | bool | +-------------+------+ seat_id is an auto-increment column for this table. Each row of this table indicates whether the i

th

seat is free or not. 1 means free while 0 means occupied.

Write a solution to find the

length

of

longest consecutive sequence

of

available

seats in the cinema.

Note:

There will always be

at most

one

longest consecutive sequence.

If there are

multiple

consecutive sequences with the

same length

, include all of them in the output.

Return

the result table

ordered

by

first_seat_id

in ascending order

.

The result format is in the following example.

Example:

Input:

Cinema table:

+---------+------+ | seat_id | free | +---------+------+ | 1 | 1 | | 2 | 0 | | 3 | 1 | | 4 | 1 | | 5 | 1 | +---------+------+

Output:

+----------------+---------------+----------------------+ | first_seat_id | last_seat_id | consecutive_seats_len | +----------------+---------------+----------------------+ | 3 | 5 | 3 | +----------------+---------------+----------------------+

Explanation:

Longest consecutive sequence of available seats starts from seat 3 and ends at seat 5 with a length of 3.

Output table is ordered by first_seat_id in ascending 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 consecutive_available_seats(cinema: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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