Problem 1709: Biggest Window Between Visits

Problem Information

Difficulty: Medium
Acceptance Rate: 69.90%
Paid Only: Yes
Tags: Database

Problem Description

Table: `UserVisits`

+-------------+------+ | Column Name | Type | +-------------+------+ | user_id | int | | visit_date | date | +-------------+------+ This table does not have a primary key, it might contain duplicate rows. This table contains logs of the dates that users visited a certain retailer.

Assume today's date is `'2021-1-1'`.

Write a solution that will, for each `user_id`, find out the largest `window` of days between each visit and the one right after it (or today if you are considering the last visit).

Return the result table ordered by `user_id`.

The query result format is in the following example.

Example 1:

Input: UserVisits table: +---------+------------+ | user_id | visit_date | +---------+------------+ | 1 | 2020-11-28 | | 1 | 2020-10-20 | | 1 | 2020-12-3 | | 2 | 2020-10-5 | | 2 | 2020-12-9 | | 3 | 2020-11-11 | +---------+------------+ **Output:** +---------+---------------+ | user_id | biggest_window| +---------+---------------+ | 1 | 39 | | 2 | 65 | | 3 | 51 | +---------+---------------+ **Explanation:** For the first user, the windows in question are between dates: - 2020-10-20 and 2020-11-28 with a total of 39 days. - 2020-11-28 and 2020-12-3 with a total of 5 days. - 2020-12-3 and 2021-1-1 with a total of 29 days. Making the biggest window the one with 39 days. For the second user, the windows in question are between dates: - 2020-10-5 and 2020-12-9 with a total of 65 days. - 2020-12-9 and 2021-1-1 with a total of 23 days. Making

the biggest window the one with 65 days. For the third user, the only window in question is between dates 2020-11-11 and 2021-1-1 with a total of 51 days.

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
```