

Problem 3124: Find Longest Calls

Problem Information

Difficulty: Medium

Acceptance Rate: 63.12%

Paid Only: Yes

Tags: Database

Problem Description

Table: `Contacts`

+-----+-----+ | Column Name | Type | +-----+-----+ | id | int | | first_name | varchar | | last_name | varchar | +-----+-----+ id is the primary key (column with unique values) of this table. id is a foreign key (reference column) to Calls table. Each row of this table contains id, first_name, and last_name.

Table: `Calls`

+-----+-----+ | Column Name | Type | +-----+-----+ | contact_id | int | | type | enum | | duration | int | +-----+-----+ (contact_id, type, duration) is the primary key (column with unique values) of this table. type is an ENUM (category) type of ('incoming', 'outgoing'). Each row of this table contains information about calls, comprising of contact_id, type, and duration in seconds.

Write a solution to find the **three longest incoming** and **three longest outgoing** calls.

Return the result table ordered by `type`, `duration`, and `first_name` in **descending order** and `duration` must be formatted as **HH:MM:SS**.

The result format is in the following example.

Example 1:

Input:

Contacts table:

```
+---+-----+-----+ | id | first_name | last_name | +---+-----+-----+ | 1 | John |
Doe | | 2 | Jane | Smith | | 3 | Alice | Johnson | | 4 | Michael | Brown | | 5 | Emily | Davis |
+---+-----+-----+
```

Calls table:

```
+-----+-----+-----+ | contact_id | type | duration | +-----+-----+-----+ | 1 |
incoming | 120 | | 1 | outgoing | 180 | | 2 | incoming | 300 | | 2 | outgoing | 240 | | 3 | incoming |
150 | | 3 | outgoing | 360 | | 4 | incoming | 420 | | 4 | outgoing | 200 | | 5 | incoming | 180 | | 5 |
outgoing | 280 | +-----+-----+-----+
```

****Output:****

```
+-----+-----+-----+ | first_name| type | duration_formatted|
+-----+-----+-----+ | Alice | outgoing | 00:06:00 | | Emily | outgoing | 00:04:40
| | Jane | outgoing | 00:04:00 | | Michael | incoming | 00:07:00 | | Jane | incoming | 00:05:00 | |
Emily | incoming | 00:03:00 | +-----+-----+-----+
```

****Explanation:****

* Alice had an outgoing call lasting 6 minutes. * Emily had an outgoing call lasting 4 minutes and 40 seconds. * Jane had an outgoing call lasting 4 minutes. * Michael had an incoming call lasting 7 minutes. * Jane had an incoming call lasting 5 minutes. * Emily had an incoming call lasting 3 minutes.

****Note:**** Output table is sorted by type, duration, and first_name 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
```