Problem 3056: Snaps Analysis

Problem Information

Difficulty: Medium
Acceptance Rate: 58.23%
Paid Only: Yes
Tags: Database

Problem Description

Table: `Activities`

+---------------+---------+ | Column Name | Type | +---------------+---------+ | activity_id | int | | user_id | int | | activity_type | enum | | time_spent | decimal | +---------------+---------+ activity_id is column of unique values for this table. activity_type is an ENUM (category) type of ('send', 'open'). This table contains activity id, user id, activity type and time spent.

Table: `Age`

+-------------+------+ | Column Name | Type | +-------------+------+ | user_id | int | | age_bucket | enum | +-------------+------+ user_id is the column of unique values for this table. age_bucket is an ENUM (category) type of ('21-25', '26-30', '31-35'). This table contains user id and age group.

Write a solution to calculate the **percentage** of the total time spent on **sending** and **opening snaps** for **each age group**. Precentage should be **rounded** to `2` decimal places.

Return _the result table_ _in**any** order._

The result format is in the following example.

Example 1:

Input: Activities table: +-------------+---------+---------------+------------+ | activity_id | user_id | activity_type | time_spent | +-------------+---------+---------------+------------+ | 7274 | 123 | open |

4.50 | | 2425 | 123 | send | 3.50 | | 1413 | 456 | send | 5.67 | | 2536 | 456 | open | 3.00 | | 8564 | 456 | send | 8.24 | | 5235 | 789 | send | 6.24 | | 4251 | 123 | open | 1.25 | | 1435 | 789 | open | 5.25 | +------------+--------+--------------+-----------+ Age table: +--------+-----------+ | user_id | age_bucket | +--------+-----------+ | 123 | 31-35 | | 789 | 21-25 | | 456 | 26-30 | +--------+-----------+ **Output:** +-----------+----------+-----------+ | age_bucket | send_perc | open_perc | +-----------+----------+-----------+ | 31-35 | 37.84 | 62.16 | | 26-30 | 82.26 | 17.74 | | 21-25 | 54.31 | 45.69 | +-----------+----------+-----------+ **Explanation:** For age group 31-35: - There is only one user belonging to this group with the user ID 123. - The total time spent on sending snaps by this user is 3.50, and the time spent on opening snaps is 4.50 + 1.25 = 5.75. - The overall time spent by this user is 3.50 + 5.75 = 9.25. - Therefore, the sending snap percentage will be (3.50 / 9.25) * 100 = 37.84, and the opening snap percentage will be (5.75 / 9.25) * 100 = 62.16. For age group 26-30: - There is only one user belonging to this group with the user ID 456. - The total time spent on sending snaps by this user is 5.67 + 8.24 = 13.91, and the time spent on opening snaps is 3.00. - The overall time spent by this user is 13.91 + 3.00 = 16.91. - Therefore, the sending snap percentage will be (13.91 / 16.91) * 100 = 82.26, and the opening snap percentage will be (3.00 / 16.91) * 100 = 17.74. For age group 21-25: - There is only one user belonging to this group with the user ID 789. - The total time spent on sending snaps by this user is 6.24, and the time spent on opening snaps is 5.25. - The overall time spent by this user is 6.24 + 5.25 = 11.49. - Therefore, the sending snap percentage will be (6.24 / 11.49) * 100 = 54.31, and the opening snap percentage will be (5.25 / 11.49) * 100 = 45.69. All percentages in output table rounded to the two decimal places.

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
```