Problem 3056: Snaps Analysis

Problem Information

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

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
```

Oracle:

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

Pandas:

```
import pandas as pd

def snap_analysis(activities: pd.DataFrame, age: pd.DataFrame) ->
pd.DataFrame:
```

Solutions

MySQL Solution:

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

MS SQL Server Solution:

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

PostgreSQL Solution:

```
-- Write your PostgreSQL query statement below
```

Oracle Solution:

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

Pandas Solution:

```
import pandas as pd

def snap_analysis(activities: pd.DataFrame, age: pd.DataFrame) ->
pd.DataFrame:
```