3056. Snaps Analysis

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.
```