Problem 1322: Ads Performance

Problem Information

Difficulty: Easy
Acceptance Rate: 58.84%
Paid Only: Yes
Tags: Database

Problem Description

Table: `Ads`

+---------------+---------+ | Column Name | Type | +---------------+---------+ | ad_id | int | | user_id | int | | action | enum | +---------------+---------+ (ad_id, user_id) is the primary key (combination of columns with unique values) for this table. Each row of this table contains the ID of an Ad, the ID of a user, and the action taken by this user regarding this Ad. The action column is an ENUM (category) type of ('Clicked', 'Viewed', 'Ignored').

A company is running Ads and wants to calculate the performance of each Ad.

Performance of the Ad is measured using Click-Through Rate (CTR) where:

Write a solution to find the `ctr` of each Ad. **Round** `ctr` to **two decimal points**.

Return the result table ordered by `ctr` in **descending order** and by `ad_id` in **ascending order** in case of a tie.

The result format is in the following example.

Example 1:

Input: Ads table: +-------+---------+---------+ | ad_id | user_id | action | +-------+---------+---------+ | 1 | 1 | Clicked | | 2 | 2 | Clicked | | 3 | 3 | Viewed | | 5 | 5 | Ignored | | 1 | 7 | Ignored | | 2 | 7 | Viewed | | 3 | 5 | Clicked | | 1 | 4 | Viewed | | 2 | 11 | Viewed | | 1 | 2 |

Clicked | +-------+---------+---------+ **Output:** +-------+-------+ | ad_id | ctr | +-------+-------+ | 1 | 66.67 | | 3 | 50.00 | | 2 | 33.33 | | 5 | 0.00 | +-------+-------+ **Explanation:** for ad_id = 1, ctr = (2/(2+1)) * 100 = 66.67 for ad_id = 2, ctr = (1/(1+2)) * 100 = 33.33 for ad_id = 3, ctr = (1/(1+1)) * 100 = 50.00 for ad_id = 5, ctr = 0.00, Note that ad_id = 5 has no clicks or views. Note that we do not care about Ignored Ads.

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
```