SQL Schema

Table: Ads

+---------------+---------+

| Column Name | Type |

+---------------+---------+

| ad\_id | int |

| user\_id | int |

| action | enum |

+---------------+---------+

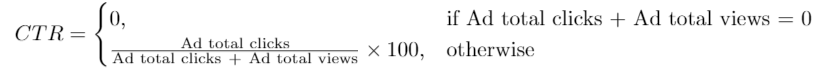
(ad\_id, user\_id) is the primary key for this table.

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 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 an SQL query to find the ctr of each Ad.

**Round** ctr to 2 decimal points. **Order** the result table by ctr in descending order and by ad\_id in ascending order in case of a tie.

The query result format is in the following example:

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 |

+-------+---------+---------+

Result table:

+-------+-------+

| ad\_id | ctr |

+-------+-------+

| 1 | 66.67 |

| 3 | 50.00 |

| 2 | 33.33 |

| 5 | 0.00 |

+-------+-------+

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 don't care about Ignored Ads.

Result table is ordered by the ctr. in case of a tie we order them by ad\_id