

2346. Compute the Rank as a Percentage

Description

Table: `Students`

Column Name	Type
<code>student_id</code>	<code>int</code>
<code>department_id</code>	<code>int</code>
<code>mark</code>	<code>int</code>

`student_id` contains unique values.
Each row of this table indicates a student's ID, the ID of the department in which the student enrolled, and their mark in the exam.

Write a solution to report the rank of each student in their department as a percentage, where the rank as a percentage is computed using the following formula:
$$\frac{(\text{student_rank_in_the_department} - 1) * 100}{(\text{the_number_of_students_in_the_department} - 1)}$$
. The `percentage` should be **rounded to 2 decimal places**. `student_rank_in_the_department` is determined by **descending** `mark`, such that the student with the highest `mark` is `rank 1`. If two students get the same mark, they also get the same rank.

Return the result table in **any order**.

The result format is in the following example.

Example 1:

Input:
Students table:

student_id	department_id	mark
2	2	650
8	2	650
7	1	920
1	1	610
3	1	530

Output:

student_id	department_id	percentage
7	1	0.0
1	1	50.0
3	1	100.0
2	2	0.0
8	2	0.0

Explanation:
For Department 1:
- Student 7: $\text{percentage} = (1 - 1) * 100 / (3 - 1) = 0.0$
- Student 1: $\text{percentage} = (2 - 1) * 100 / (3 - 1) = 50.0$
- Student 3: $\text{percentage} = (3 - 1) * 100 / (3 - 1) = 100.0$
For Department 2:
- Student 2: $\text{percentage} = (1 - 1) * 100 / (2 - 1) = 0.0$
- Student 8: $\text{percentage} = (1 - 1) * 100 / (2 - 1) = 0.0$

