

Table: Students

Column Name	Type
student_id	int
department_id	int
mark	int

student_id is the primary key of this table.

Each row of this table indicates a student's ID, the ID of the department in which the s

Write an SQL query that reports the rank of each student in their department as a percentage, where the rank as a percentage is computed using the following formula: $(\text{student_rank_in_the_department} - 1) * 100 / (\text{the_number_of_students_in_the_department} - 1)$. 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 query 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	
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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: $\text{percentage} = (1 - 1) * 100 / (2 - 1) = 0.0$