DESCRIPTION

Table: Teacher

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

| Column Name | Type |

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

| teacher_id | int |

| subject_id | int |

| dept_id | int |

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

(subject_id, dept_id) is the primary key (combinations of columns with unique values) of this table.

Each row in this table indicates that the teacher with teacher_id teaches the subject subject_id in the department dept_id.

Write a solution to calculate the number of unique subjects each teacher teaches in the university.

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

The result format is shown in the following example.

Example 1:

Input:

Teacher table:

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

| teacher_id | subject_id | dept_id |

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

| 1 | 2 | 3 |

| 1 | 2 | 4 |

| 1 | 3 | 3 |

| 2 | 1 | 1 |

| 2 | 2 | 1 |

| 2 | 3 | 1 |

| 2 | 4 | 1 |

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

Output:

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

| teacher_id | cnt |

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

| 1 | 2 |

| 2 | 4 |

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

Explanation:

Teacher 1:

- They teach subject 2 in departments 3 and 4.
- They teach subject 3 in department 3.

Teacher 2:

- They teach subject 1 in department 1.
- They teach subject 2 in department 1.
- They teach subject 3 in department 1.
- They teach subject 4 in department 1.

SOLUTION

MySQL:

- Select `teacher_id`, and cnt using COUNT DISTINCT
- GROUP BY `teacher_id`

```
SELECT teacher_id, COUNT(DISTINCT subject_id) cnt
FROM Teacher
GROUP BY teacher_id;
```

PostgreSQL:

- Same approach as above

```sql
SELECT teacher_id, COUNT(DISTINCT subject_id) cnt
FROM Teacher
GROUP BY 1;
```