Problem 2356: Number of Unique Subjects Taught by Each Teacher

Problem Information

Difficulty: Easy
Acceptance Rate: 0.00%
Paid Only: No

Problem 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.

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
```

Oracle:

```
/* Write your PL/SQL query statement below */
```

Pandas:

```
import pandas as pd

def count_unique_subjects(teacher: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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