Problem 618: Students Report By Geography

Problem Information

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

Problem Description

Table:

Student

+-------------+---------+ | Column Name | Type | +-------------+---------+ | name | varchar | | continent | varchar | +-------------+---------+ This table may contain duplicate rows. Each row of this table indicates the name of a student and the continent they came from.

A school has students from Asia, Europe, and America.

Write a solution to

pivot

the continent column in the

Student

table so that each name is

sorted alphabetically

and displayed underneath its corresponding continent. The output headers should be

America

,

Asia

, and

Europe

, respectively.

The test cases are generated so that the student number from America is not less than either Asia or Europe.

The result format is in the following example.

Example 1:

Input:

Student table: +--------+-----------+ | name | continent | +--------+-----------+ | Jane | America | | Pascal | Europe | | Xi | Asia | | Jack | America | +--------+-----------+

Output:

+---------+------+--------+ | America | Asia | Europe | +---------+------+--------+ | Jack | Xi | Pascal | | Jane | null | null | +---------+------+--------+

Follow up:

If it is unknown which continent has the most students, could you write a solution to generate the student report?

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 geography_report(student: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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