

# Problem 618: Students Report By Geography

## Problem Information

**Difficulty:** Hard

**Acceptance Rate:** 63.63%

**Paid Only:** Yes

**Tags:** Database

## 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]([https://en.wikipedia.org/wiki/Pivot\\_table](https://en.wikipedia.org/wiki/Pivot_table)) 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
```