

# Problem 2175: The Change in Global Rankings

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 60.72%

**Paid Only:** Yes

**Tags:** Database

## Problem Description

Table: `TeamPoints`

+-----+-----+ | Column Name | Type | +-----+-----+ | team\_id | int | | name | varchar | | points | int | +-----+-----+ team\_id contains unique values. Each row of this table contains the ID of a national team, the name of the country it represents, and the points it has in the global rankings. No two teams will represent the same country.

Table: `PointsChange`

+-----+-----+ | Column Name | Type | +-----+-----+ | team\_id | int | | points\_change | int | +-----+-----+ team\_id contains unique values. Each row of this table contains the ID of a national team and the change in its points in the global rankings. points\_change can be: - 0: indicates no change in points. - positive: indicates an increase in points. - negative: indicates a decrease in points. Each team\_id that appears in TeamPoints will also appear in this table.

The \*\*global ranking\*\* of a national team is its rank after sorting all the teams by their points \*\*in descending order\*\*. If two teams have the same points, we break the tie by sorting them by their name \*\*in lexicographical order\*\*.

The points of each national team should be updated based on its corresponding `points\_change` value.

Write a solution to calculate the change in the global rankings after updating each team's points.

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

The result format is in the following example.

**Example 1:**

**Input:** TeamPoints table: +-----+-----+-----+ | team\_id | name | points |  
+-----+-----+-----+ | 3 | Algeria | 1431 | | 1 | Senegal | 2132 | | 2 | New Zealand |  
1402 | | 4 | Croatia | 1817 | +-----+-----+  
**PointsChange** table:  
+-----+-----+-----+ | team\_id | points\_change | +-----+-----+ | 3 | 399 | | 2 | 0 | | 4 |  
13 | | 1 | -22 | +-----+-----+  
**Output:** +-----+-----+-----+ | team\_id |  
name | rank\_diff | +-----+-----+ | 1 | Senegal | 0 | | 4 | Croatia | -1 | | 3 |  
Algeria | 1 | | 2 | New Zealand | 0 | +-----+-----+  
**Explanation:** The global  
rankings were as follows: +-----+-----+-----+ | team\_id | name | points | rank |  
+-----+-----+-----+ | 1 | Senegal | 2132 | 1 | | 4 | Croatia | 1817 | 2 | | 3 | Algeria  
| 1431 | 3 | | 2 | New Zealand | 1402 | 4 | +-----+-----+-----+  
After updating the  
points of each team, the rankings became the following: +-----+-----+-----+ |  
team\_id | name | points | rank | +-----+-----+-----+ | 1 | Senegal | 2110 | 1 | | 3 |  
Algeria | 1830 | 2 | | 4 | Croatia | 1830 | 3 | | 2 | New Zealand | 1402 | 4 |  
+-----+-----+-----+ Since after updating the points Algeria and Croatia have  
the same points, they are ranked according to their lexicographic order. Senegal lost 22 points  
but their rank did not change. Croatia gained 13 points but their rank decreased by one.  
Algeria gained 399 points and their rank increased by one. New Zealand did not gain or lose  
points and their rank did not change.

## 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
```