Problem 2004: The Number of Seniors and Juniors to Join the Company

Problem Information

Difficulty: Hard
Acceptance Rate: 45.57%
Paid Only: Yes
Tags: Database

Problem Description

Table: `Candidates`

+-------------+------+ | Column Name | Type | +-------------+------+ | employee_id | int | | experience | enum | | salary | int | +-------------+------+ employee_id is the column with unique values for this table. experience is an ENUM (category) type of values ('Senior', 'Junior'). Each row of this table indicates the id of a candidate, their monthly salary, and their experience.

A company wants to hire new employees. The budget of the company for the salaries is `$70000`. The company's criteria for hiring are:

1. Hiring the largest number of seniors. 2. After hiring the maximum number of seniors, use the remaining budget to hire the largest number of juniors.

Write a solution to find the number of seniors and juniors hired under the mentioned criteria.

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

The result format is in the following example.

Example 1:

Input: Candidates table: +-------------+------------+--------+ | employee_id | experience | salary | +-------------+------------+--------+ | 1 | Junior | 10000 | | 9 | Junior | 10000 | | 2 | Senior | 20000 | | 11 | Senior | 20000 | | 13 | Senior | 50000 | | 4 | Junior | 40000 | +-------------+------------+--------+ **Output:** +------------+---------------------+ | experience | accepted_candidates |

+------------+---------------------+ | Senior | 2 | | Junior | 2 | +------------+---------------------+
Explanation: We can hire 2 seniors with IDs (2, 11). Since the budget is $70000 and the sum of their salaries is $40000, we still have $30000 but they are not enough to hire the senior candidate with ID 13. We can hire 2 juniors with IDs (1, 9). Since the remaining budget is $30000 and the sum of their salaries is $20000, we still have $10000 but they are not enough to hire the junior candidate with ID 4.

Example 2:

Input: Candidates table: +-------------+------------+--------+ | employee_id | experience | salary | +-------------+------------+--------+ | 1 | Junior | 10000 | | 9 | Junior | 10000 | | 2 | Senior | 80000 | | 11 | Senior | 80000 | | 13 | Senior | 80000 | | 4 | Junior | 40000 | +-------------+------------+--------+
Output: +------------+---------------------+ | experience | accepted_candidates | +------------+---------------------+ | Senior | 0 | | Junior | 3 | +------------+---------------------+
Explanation: We cannot hire any seniors with the current budget as we need at least $80000 to hire one senior. We can hire all three juniors with the remaining budget.

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
```