3061. Calculate Trapping Rain Water Premium

Hard Topics

SQL Schema > Pandas Schema >

Table: `Heights`

```
+-------------+------+
| Column Name | Type |
+-------------+------+
| id          | int  |
| height      | int  |
+-------------+------+
id is the primary key (column with unique values) for this table, and it is guaranteed to be in sequential order.
Each row of this table contains an id and height.
```

Write a solution to calculate the amount of rainwater can be **trapped between the bars** in the landscape, considering that each bar has a **width** of `1` unit.

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

The result format is in the following example.

Example 1:

Input:
Heights table:

```
+----+--------+
| id | height |
+----+--------+
| 1  | 0      |
| 2  | 1      |
| 3  | 0      |
| 4  | 2      |
| 5  | 1      |
| 6  | 0      |
| 7  | 1      |
| 8  | 3      |
| 9  | 2      |
| 10 | 1      |
| 11 | 2      |
| 12 | 1      |
+----+--------+
```

Output:

```
+--------------------+
| total_trapped_water |
+--------------------+
| 6                  |
+--------------------+
```

Explanation:

The elevation map depicted above (in the black section) is graphically represented with the x-axis denoting the id and the y-axis representing the heights [0,1,0,2,1,0,1,3,2,1,2,1]. In this scenario, 6 units of rainwater are trapped within the blue section.

Seen this question in a real interview before? 1/5

Yes No

Accepted **867** | Submissions **1.1K** | Acceptance Rate **80.7%**

Topics

Database

Discussion (4)