

## 2300. Successful Pairs of Spells and Potions

Solved ●

Medium

Topics



Hint

You are given two positive integer arrays `spells` and `potions`, of length `n` and `m` respectively, where `spells[i]` represents the strength of the  $i^{\text{th}}$  spell and `potions[j]` represents the strength of the  $j^{\text{th}}$  potion.

You are also given an integer `success`. A spell and potion pair is considered **successful** if the **product** of their strengths is **at least** `success`.

Return an integer array `pairs` of length `n` where `pairs[i]` is the number of **potions** that will form a successful pair with the  $i^{\text{th}}$  spell.

### Example 1:

**Input:** `spells = [5,1,3]`, `potions = [1,2,3,4,5]`, `success = 7`

**Output:** `[4,0,3]`

**Explanation:**

- $0^{\text{th}}$  spell:  $5 * [1,2,3,4,5] = [5, \mathbf{10}, \mathbf{15}, \mathbf{20}, \mathbf{25}]$ . 4 pairs are successful.
  - $1^{\text{st}}$  spell:  $1 * [1,2,3,4,5] = [1,2,3,4,5]$ . 0 pairs are successful.
  - $2^{\text{nd}}$  spell:  $3 * [1,2,3,4,5] = [3,6, \mathbf{9}, \mathbf{12}, \mathbf{15}]$ . 3 pairs are successful.
- Thus, `[4,0,3]` is returned.

### Example 2:

**Input:** `spells = [3,1,2]`, `potions = [8,5,8]`, `success = 16`

**Output:** `[2,0,2]`

**Explanation:**

- $0^{\text{th}}$  spell:  $3 * [8,5,8] = [\mathbf{24}, 15, \mathbf{24}]$ . 2 pairs are successful.
  - $1^{\text{st}}$  spell:  $1 * [8,5,8] = [8,5,8]$ . 0 pairs are successful.
  - $2^{\text{nd}}$  spell:  $2 * [8,5,8] = [\mathbf{16}, 10, \mathbf{16}]$ . 2 pairs are successful.
- Thus, `[2,0,2]` is returned.

### Constraints:

- `n == spells.length`
- `m == potions.length`
- `1 <= n, m <= 105`
- `1 <= spells[i], potions[i] <= 105`
- `1 <= success <= 1010`

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

Yes No

Accepted 318.795/661.5K | Acceptance Rate 48.2%

Topics



Hint 1

Hint 2



Hint 3



Similar Questions



Discussion (222)



Copyright © 2025 LeetCode. All rights reserved.