[2300. Successful Pairs of Spells and Potions](https://leetcode.com/problems/successful-pairs-of-spells-and-potions/)

Medium

2.3K

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Companies

You are given two positive integer arrays spells and potions, of length n and m respectively, where spells[i] represents the strength of the ith spell and potions[j] represents the strength of the jth 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*ith*spell.*

**Example 1:**

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

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

**Explanation:**

- 0th spell: 5 \* [1,2,3,4,5] = [5,**10**,**15**,**20**,**25**]. 4 pairs are successful.

- 1st spell: 1 \* [1,2,3,4,5] = [1,2,3,4,5]. 0 pairs are successful.

- 2nd spell: 3 \* [1,2,3,4,5] = [3,6,**9**,**12**,**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:**

- 0th spell: 3 \* [8,5,8] = [**24**,15,**24**]. 2 pairs are successful.

- 1st spell: 1 \* [8,5,8] = [8,5,8]. 0 pairs are successful.

- 2nd spell: 2 \* [8,5,8] = [**16**,10,**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