2300. Successful Pairs of Spells and Potions

Description

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 th` spell and `potions[j]` represents the strength of the `j 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 th` *spell.*

Example 1:

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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:

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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 <= 10^5`
- `1 <= spells[i], potions[i] <= 10^5`
- `1 <= success <= 10^10`