

2279. Maximum Bags With Full Capacity of Rocks

Hint ⓘ

Medium



1.4K

63



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You have n bags numbered from 0 to $n - 1$. You are given two **0-indexed** integer arrays `capacity` and `rocks`. The i^{th} bag can hold a maximum of `capacity[i]` rocks and currently contains `rocks[i]` rocks. You are also given an integer `additionalRocks`, the number of additional rocks you can place in **any** of the bags.

Return the **maximum** number of bags that could have full capacity after placing the additional rocks in some bags.

Example 1:

Input: `capacity = [2,3,4,5]`, `rocks = [1,2,4,4]`, `additionalRocks = 2`

Output: 3

Explanation:

Place 1 rock in bag 0 and 1 rock in bag 1.

The number of rocks in each bag are now `[2,3,4,4]`.

Bags 0, 1, and 2 have full capacity.

There are 3 bags at full capacity, so we return 3.

It can be shown that it is not possible to have more than 3 bags at full capacity.

Note that there may be other ways of placing the rocks that result in an answer of 3.

Example 2:

Input: `capacity = [10,2,2]`, `rocks = [2,2,0]`, `additionalRocks = 100`

Output: 3

Explanation:

Place 8 rocks in bag 0 and 2 rocks in bag 2.

The number of rocks in each bag are now `[10,2,2]`.

Bags 0, 1, and 2 have full capacity.

There are 3 bags at full capacity, so we return 3.

It can be shown that it is not possible to have more than 3 bags at full capacity.

Note that we did not use all of the additional rocks.

Constraints:

- $n == \text{capacity.length} == \text{rocks.length}$
- $1 \leq n \leq 5 \cdot 10^4$
- $1 \leq \text{capacity}[i] \leq 10^9$
- $0 \leq \text{rocks}[i] \leq \text{capacity}[i]$
- $1 \leq \text{additionalRocks} \leq 10^9$

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Yes No

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