

502. IPO

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Suppose LeetCode will start its **IPO** soon. In order to sell a good price of its shares to Venture Capital, LeetCode would like to work on some projects and finance their IPO.

You are given n projects where the i^{th} project has a pure profit `profits[i]` and a minimum capital of `capital[i]` is needed to start it.

Initially, you have w capital. When you finish a project, you will obtain its pure profit and the profit will be added to your total capital.

Pick a list of **at most** k distinct projects from given projects to **maximize your final capital**, and return *the final maximized capital*.

The answer is guaranteed to fit in a 32-bit signed integer.

Example 1:

Input: `k = 2, w = 0, profits = [1,2,3], capital = [0,1,1]`
Output: `4`
Explanation: Since your initial capital is 0, you can only start the project indexed 0. After finishing it you will obtain profit 1 and your capital becomes 1. With capital 1, you can either start the project indexed 1 or the project indexed 2. Since you can choose at most 2 projects, you need to finish the project indexed 2 to get the maximum profit. Therefore, output the final maximized capital, which is 0 + 1 + 3 = 4.

Example 2:

Input: `k = 3, w = 0, profits = [1,2,3], capital = [0,1,2]`
Output: `6`

Constraints:

- $1 \leq k \leq 10^5$
- $0 \leq w \leq 10^9$
- $n == profits.length$
- $n == capital.length$
- $1 \leq n \leq 10^5$
- $0 \leq profits[i] \leq 10^4$
- $0 \leq capital[i] \leq 10^9$

Seen this question in a real interview before? 1/4

Yes No

Accepted **115.1K** Submissions **232.4K** Acceptance Rate **49.5%**

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