

2262. Solving Questions With Brainpower

Difficulty : Medium

<https://leetcode.com/problems/solving-questions-with-brainpower>

You are given a **0-indexed** 2D integer array `questions` where `questions[i] = [pointsi, brainpoweri]`.

The array describes the questions of an exam, where you have to process the questions **in order** (i.e., starting from question 0) and make a decision whether to **solve** or **skip** each question. Solving question `i` will **earn** you `pointsi` points but you will be **unable** to solve each of the next `brainpoweri` questions. If you skip question `i`, you get to make the decision on the next question.

- For example, given `questions = [[3, 2], [4, 3], [4, 4], [2, 5]]`:
 - If question 0 is solved, you will earn 3 points but you will be unable to solve questions 1 and 2.
 - If instead, question 0 is skipped and question 1 is solved, you will earn 4 points but you will be unable to solve questions 2 and 3.

Return the **maximum** points you can earn for the exam.

Example 1:

Input: `questions = [[3,2],[4,3],[4,4],[2,5]]`

Output: 5

Explanation: The maximum points can be earned by solving questions 0 and 3.

- Solve question 0: Earn 3 points, will be unable to solve the next 2 questions
- Unable to solve questions 1 and 2
- Solve question 3: Earn 2 points

Total points earned: 3 + 2 = 5. There is no other way to earn 5 or more points.

Example 2:

Input: `questions = [[1,1],[2,2],[3,3],[4,4],[5,5]]`

Output: 7

Explanation: The maximum points can be earned by solving questions 1 and 4.

- Skip question 0
- Solve question 1: Earn 2 points, will be unable to solve the next 2 questions
- Unable to solve questions 2 and 3
- Solve question 4: Earn 5 points

Total points earned: 2 + 5 = 7. There is no other way to earn 7 or more points.

Constraints:

- $1 \leq \text{questions.length} \leq 10^5$
- $\text{questions}[i].\text{length} == 2$
- $1 \leq \text{points}_i, \text{brainpower}_i \leq 10^5$