

You are given an array tasks where $\text{tasks}[i] = [\text{actual}_i, \text{minimum}_i]$:

- actual_i is the actual amount of energy you **spend to finish** the i^{th} task.
- minimum_i is the minimum amount of energy you **require to begin** the i^{th} task.

For example, if the task is [10, 12] and your current energy is 11, you cannot start this task. However, if your current energy is 13, you can complete this task, and your energy will be 3 after finishing it.

You can finish the tasks in **any order** you like.

Return the **minimum** initial amount of energy you will need to finish all the tasks.

Example 1:

Input: tasks = [[1,2],[2,4],[4,8]]

Output: 8

Explanation:

Starting with 8 energy, we finish the tasks in the following order:

- 3rd task. Now energy = $8 - 4 = 4$.
- 2nd task. Now energy = $4 - 2 = 2$.
- 1st task. Now energy = $2 - 1 = 1$.

Notice that even though we have leftover energy, starting with 7 energy does not work because we cannot do the 3rd task.

Example 2:

Input: tasks = [[1,3],[2,4],[10,11],[10,12],[8,9]]

Output: 32

Explanation:

Starting with 32 energy, we finish the tasks in the following order:

- 1st task. Now energy = $32 - 1 = 31$.
- 2nd task. Now energy = $31 - 2 = 29$.
- 3rd task. Now energy = $29 - 10 = 19$.
- 4th task. Now energy = $19 - 10 = 9$.
- 5th task. Now energy = $9 - 8 = 1$.

Example 3:

Input: tasks = [[1,7],[2,8],[3,9],[4,10],[5,11],[6,12]]

Output: 27

Explanation:

Starting with 27 energy, we finish the tasks in the following order:

- 5th task. Now energy = $27 - 5 = 22$.
- 2nd task. Now energy = $22 - 2 = 20$.
- 3rd task. Now energy = $20 - 3 = 17$.
- 1st task. Now energy = $17 - 1 = 16$.
- 4th task. Now energy = $16 - 4 = 12$.
- 6th task. Now energy = $12 - 6 = 6$.

Constraints:

- $1 \leq \text{tasks.length} \leq 10^5$
- $1 \leq \text{actual}_i \leq \text{minimum}_i \leq 10^4$