

2164. Two Best Non-Overlapping Events

Difficulty : Medium

<https://leetcode.com/problems/two-best-non-overlapping-events>

You are given a **0-indexed** 2D integer array of events where $\text{events}[i] = [\text{startTime}_i, \text{endTime}_i, \text{value}_i]$. The i^{th} event starts at startTime_i and ends at endTime_i , and if you attend this event, you will receive a value of value_i . You can choose **at most two non-overlapping** events to attend such that the sum of their values is **maximized**.

Return *this maximum sum*.

Note that the start time and end time is **inclusive**: that is, you cannot attend two events where one of them starts and the other ends at the same time. More specifically, if you attend an event with end time t , the next event must start at or after $t + 1$.

Example 1:

Time	1	2	3	4	5
Event 0	2				
Event 1				2	
Event 2		3			

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

Output: 4

Explanation: Choose the green events, 0 and 1 for a sum of $2 + 2 = 4$.

Example 2:

Time	1	2	3	4	5
Event 0	2				
Event 1				2	
Event 2	5				

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

Output: 5

Explanation: Choose event 2 for a sum of 5.

Example 3:

Time	1	2	3	4	5	6
Event 0	3					
Event 1	1					
Event 2						5

Input: `events = [[1,5,3],[1,5,1],[6,6,5]]`

Output: 8

Explanation: Choose events 0 and 2 for a sum of $3 + 5 = 8$.

Constraints:

- $2 \leq \text{events.length} \leq 10^5$
- $\text{events}[i].\text{length} == 3$
- $1 \leq \text{startTime}_i \leq \text{endTime}_i \leq 10^9$
- $1 \leq \text{value}_i \leq 10^6$