1851. Maximum Number of Events That Can Be Attended II

Difficulty: Hard

https://leetcode.com/problems/maximum-number-of-events-that-can-be-attended-ii

You are given an array of events where events[i] = [startDay_i, endDay_i, value_i]. The ith event starts at startDay_i and ends at endDay_i, and if you attend this event, you will receive a value of value_i. You are also given an integer k which represents the maximum number of events you can attend.

You can only attend one event at a time. If you choose to attend an event, you must attend the **entire** event. Note that the end day is **inclusive**: that is, you cannot attend two events where one of them starts and the other ends on the same day.

Return the **maximum sum** of values that you can receive by attending events.

Example 1:

Time	1	2	3	4
Event 0	4	1		
Event 1			;	3
Event 2		1		

Input: events = [[1,2,4],[3,4,3],[2,3,1]], k = 2

Output: 7

Explanation: Choose the green events, \emptyset and 1 (\emptyset -indexed) for a total value of 4 + 3 = 7.

Example 2:

Time	1	2	3	4
Event 0	4	1		
Event 1			;	3
Event 2		10		

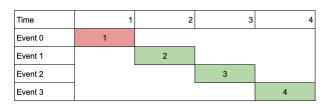
Input: events = [[1,2,4],[3,4,3],[2,3,10]], k = 2

Output: 10

Explanation: Choose event 2 for a total value of 10.

Notice that you cannot attend any other event as they overlap, and that you do **not** have to attend k events.

Example 3:



Input: events = [[1,1,1],[2,2,2],[3,3,3],[4,4,4]], k = 3

Output: 9

Explanation: Although the events do not overlap, you can only attend 3 events. Pick the highest valued three.

Constraints:

- 1 <= k <= events.length
- 1 <= k * events.length <= 10^6
- 1 <= $startDay_i$ <= $endDay_i$ <= 10^9
- 1 <= value_i <= 10^6