Problem E. Cinema

Time limit 2000 ms
Memory limit 256MB

Problem Description

A newly opened cinema is showing the latest blockbuster movie. The demand is overwhelming—everyone wants to reserve seats! However, you are a greedy manager: instead of following a first-come-first-served rule, your goal is simply to earn as much money as possible.

There are N groups of customers who want to reserve seats. The i-th group requests a continuous interval of seats from seat number l_i to r_i, and they are willing to pay w_i dollars to reserve that entire range of seats.

Your task is to select a subset of these customer groups to maximize the total revenue the cinema can receive. However, to avoid disputes, you cannot sell any seat to more than one group.

Output the maximum total revenue you can obtain.

Input format

The first line contains an integer N, the number of customer groups. ($1 \leq N \leq 5 \cdot 10^5$)

Each of the next N lines contains three integers l_i, r_i, w_i, describing the requested interval and offered price for the i-th group. ($0 \leq l_i \leq r_i \leq 10^9$, $1 \leq w_i \leq 10^9$)

Output format

Print a single integer: the maximum total revenue the cinema can obtain.

Subtask score

Subtask	Score	Additional Constraints
0	0	Sample testcases
1	53	$w_i = 1$ for $1 \leq i \leq N$
2	20	$N \leq 3000$
3	27	No additional constraints

Sample

Sample Input 1

```
5
1 4 2
2 2 4
3 6 1
4 7 2
7 10 5
```

Sample Output 1

```
10
```

Sample Input 2

```
5
1 3 1
2 5 1
8 9 1
4 7 1
6 7 1
```

Sample Output 2

```
3
```