Social Master - II

Problem Statement

There are n events you can attend.

For each event s, you know its starting date $a(s)$, its ending date $b(s)$, and **the reward points $p(s)$ you would get if you attend the event**.

You cannot attend more than one event in each day. Furthermore, once you attend an event, you will stay in that event until it ends.

What is the maximum **reward points** you can get?

Input

The first input line contains an integer n: the number of events.

After this, there are n lines. Each line has three integers a, b, and p : the starting date, the ending date, and the reward point of the event.

Output

Print one integer: the maximum **reward points** you can get.

Constraints

$1 \leq n \leq 2 \cdot 10^5$
$1 \leq a \leq b \leq 10^9$
$1 \leq p \leq 10^9$

Example

Input:

4
2 4 4
3 6 6
6 8 2
5 7 3

Output:

7