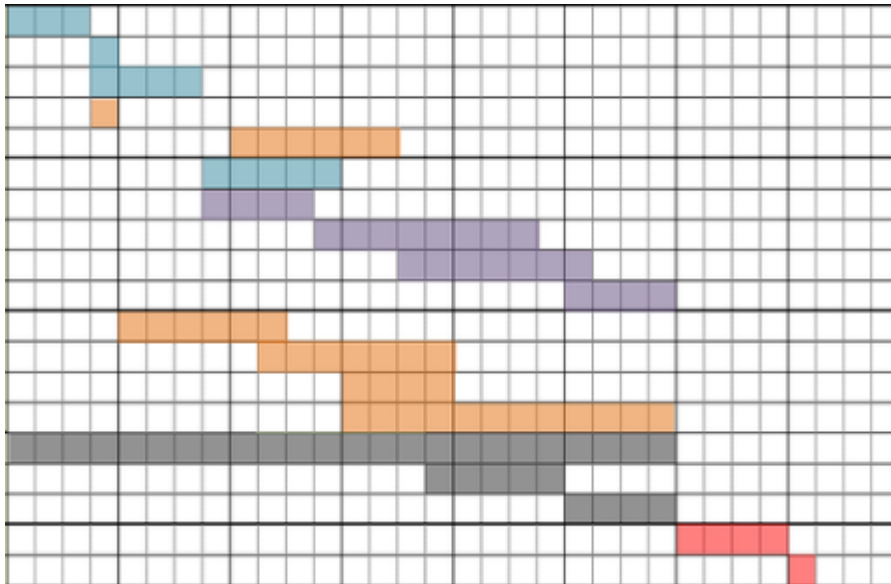


Homework #2

1.



There are n Olympiads in Informatics you can attend. For each Olympiad, you know its starting and ending days and the amount of money you would get as reward. You can only attend one Olympiad during a day.

What is the maximum amount of money you can earn?

Input

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

After this, there are n lines. Each such line has three integers a_i , b_i and p_i : the starting day, the ending day, and the reward.

Output

Print one integer: the maximum amount of money you can earn.

Constraints

- $1 \leq n \leq 2 \cdot 10^5$
- $1 \leq a_i \leq b_i \leq 10^9$
- $1 \leq p_i \leq 10^9$

Example

Input:

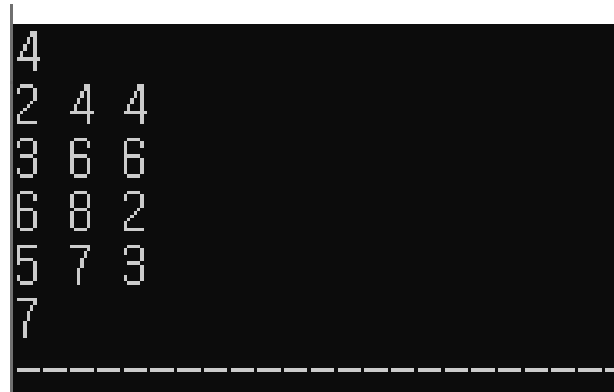
4

2 4 4

3 6 6

6 8 2

5 7 3



Output :

7

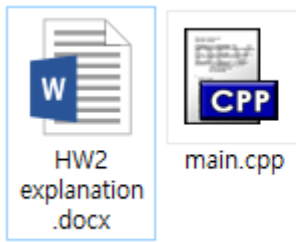
You have to read input number using 'cin' and show output number using 'cout'.

If you use brute force algorithm , the time complexity is $O(2^n)$.

You have to reduce time complexity, using dynamic programming.

The perfect algorithm's time complexity is $O(n \log n)$

Next, good algorithm's time complexity is $O(N^2)$.



You can use only C or C++ languages

You have to submit explanation report (use word or hwp) and code source file

And if you have any question, please message or e-mail to TA