

Problem B. Intel CPU

Problem Description

When the dark Halloween night descended, Intel Elves and AMD Elves gathered together, intensifying their fierce battle. Under the moonlight, they engaged in a heart-pounding showdown, seamlessly combining the powers of technology and magic.

Intel Elves wielded the enchanted code like ghosts, swift and agile, their eyes shining with infinite wisdom. Meanwhile, AMD Elves controlled mysterious energy, sparking into lightning bolts, showcasing unparalleled speed and strength.

In this dark night sky, their battle depicted the enchanting fusion of technology and magic. Intel Elves' Code Swords clashed with AMD Elves' Thunder Hammers, transforming into magnificent magical displays, stunning the entire Halloween night.

Then the wicked witch KCW cast an evil spell, transforming Intel and AMD Elves into Intel CPUs, helping KCW lab create a joyful candy known as "algorithm." The reason why KCW don't transform to AMD CPUs since he doesn't like using AMD CPUs.

Instead of using AMD CPUs. KCW loves using Intel CPUs in his lab. Now, in order to make more "algorithm" candies to make the world wonderful, he needs more Intel CPUs.

KCW plans to participate in n auctions. The auctions will be held at very specific times. There are also some additional rules need to follow.

1. You can only join **one auction** at the same time.
2. Once you decided to join an auction, you must attend it from the beginning until the end.
3. The i^{th} auction starts at time s_i and ends at time $e_i + 0.5$.
4. You can earn x_i Intel CPUs after participating in the i^{th} auction.

As a good programmer, can you help KCW find out the maximum number of Intel CPUs he can earn if he participates optimally?

Input Format

- line 1: n
- line $1 + i$ ($1 \leq i \leq n$): $s_i \ e_i \ x_i$

Output Format

- line 1: the maximum number of Intel CPUs KCW can earn.

Constraints

- $1 \leq n \leq 500\,000$.
- $1 \leq s_i \leq e_i \leq 1\,000\,000\,000$ for $i = 1, 2, \dots, n$.
- $1 \leq x_i \leq 1\,000\,000\,000$ for $i = 1, 2, \dots, n$.
- All inputs are integers.

Subtasks

1. (40 points) $x_i = 1$ for $i = 1, 2, \dots, n$.
2. (60 points) No additional constraints.

No.	Testdata Range	Time Limit (ms)	Memory Limit (KiB)
Samples	1-2	1500	262144
1	3-17	1500	262144
2	1-32	1500	262144

Samples

Sample Input 1

```
4
1 2 1
2 3 1
3 4 1
4 5 1
```

This sample input satisfies the constraints of all the subtasks.

Sample Output 1

```
2
```

KCW can join 1st and 3rd auction and get 2 Intel CPUs.

Sample Input 2

```
4
1 2 2
2 3 3
3 4 4
4 5 5
```

This sample input satisfies the constraints of Subtask 2.

Sample Output 2

```
8
```

KCW can join 2nd and 4th auction and get 8 Intel CPUs.