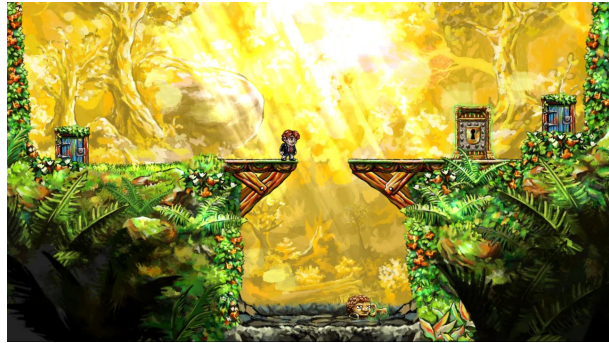


The Return of 2D

Your friend is playing a computer game, but he never manages to get a perfect score. Now, he is asking you to take a break from your computer science stuff and help him out. The goal of the game is to get your energy level as high as possible by jumping back and forth among platforms. On some of the platforms there are energy balls and whenever he absorbs such a ball his energy level increases by one.



The player can move around on a platform without using any energy, jumping on the other hand is extremely tiresome. To jump from one platform to another, where the two platforms are a distance d away from each other, requires d energy. The energy level of the player can never get below zero.

Input

On the first line you are given an integer P ($1 \leq P \leq 500$), the number of platforms. After this follows P lines with three integers a , b and e , where a is the leftmost point of the platform, b is the rightmost point of the platform and e is the number of energy balls on this platform. The final line contains two integers, A and E . A is the coordinate where the player is starting initially and E his initial energy level ($0 \leq a, b, e, A, E \leq 10000000$).

No platforms are overlapping and there will always be a platform covering A . Although your friend is not as good a problem solver as you are, he is still capable of sorting some data. To feel like he has contributed he has sorted the platforms by their leftmost point in ascending order.

Output

A single integer, the maximal energy level the player can achieve.

Sample Input 1

```
2
0 2 1
3 4 5
0 0
```

Sample Output 1

```
5
```

Sample Input 2

```
2
0 1 1
10 11 100000
1 5
```

Sample Output 2

```
6
```

Sample Input 3

```
4
0 1 7
3 4 0
5 6 3
10 11 1000
3 1
```

Sample Output 3

```
1000
```