Educational DP Contest AtCoder C - Vacation

Time limit: 1.0s **Memory limit:** 1G

Taro's summer vacation starts tomorrow, and he has decided to make plans for it now.

The vacation consists of N days. For each i ($1 \le i \le N$), Taro will choose one of the following activities and do it on the i-th day:

- A: Swim in the sea. Gain a_i points of happiness.
- B: Catch bugs in the mountains. Gain b_i points of happiness.
- C: Do homework at home. Gain c_i points of happiness.

As Taro gets bored easily, he cannot do the same activities for two or more consecutive days.

Find the maximum possible total points of happiness that Taro gains.

Constraints

- All values in input are integers.
- $1 \le N \le 10^5$
- $1 \le a_i, b_i, c_i \le 10^4$

Input Specification

The first line will contain the integer N.

The next N lines will each contain 3 space separated integers, a_i, b_i, c_i .

Output Specification

Print the maximum possible total points of happiness that Taro gains.

Sample Input 1

Sample Output 1

210

Explanation For Sample 1

If Taro does activities in the order C, B, C, he will gain 70+50+90=210 points of happiness.

Sample Input 2

```
1
100 10 1
```

Sample Output 2

100

Sample Input 3

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

Sample Output 3

46

Explanation For Sample 3

Taro should do activities in the order C, A, B, A, C, B, A.