C - Vacation

Time Limit: 2 sec / Memory Limit: 1024 MB

Score : 100 points

Problem Statement

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 ($1 \leq i \leq N$), 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.
- $1 \leq N \leq 10^5$
- $1 \leq a_i, b_i, c_i \leq 10^4$

Input

Input is given from Standard Input in the following format:

$$
\begin{array}{l}
N \\
a_1 \quad b_1 \quad c_1 \\
a_2 \quad b_2 \quad c_2 \\
: \\
a_N \quad b_N \quad c_N
\end{array}
$$

Output

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

Sample Input 1 Copy

```
3
10 40 70
20 50 80
30 60 90
```

Sample Output 1

```
210
```

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
```

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