Problem B. Vacation

Time limit 2000 ms **Mem limit** 1048576 kB

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 ($1 \le i \le N$), 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

Input is given from Standard Input in the following format:

Output

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

Sample 1

Input	Output
3 10 40 70 20 50 80 30 60 90	210

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

Sample 2

Output
90
90

Sample 3

Input	Output
7 6 7 8 8 8 3 2 5 2 7 8 6 4 6 8 2 3 4 7 5 1	46

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