# Vacation

| | |
|---|---|
| Input file: | `standard input` |
| Output file: | `standard output` |
| Time limit: | 2 seconds |
| Memory limit: | 256 megabytes |

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.

## Input

The first line contains single integer $N$, denoting the number of vacation days.
Each of the next $N$ lines contains three integers $a_i$, $b_i$ and $c_i$.

**Constraints:**

$1 \leq N \leq 20$

$1 \leq a_i, b_i, c_i \leq 10^4$

## Output

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

## Examples

| standard input | standard output |
|---|---|
| 3<br>10 40 70<br>20 50 80<br>30 60 90 | 210 |
| 1<br>100 10 1 | 100 |
| 7<br>6 7 8<br>8 8 3<br>2 5 2<br>7 8 6<br>4 6 8<br>2 3 4<br>7 5 1 | 46 |

## Note

For testcase 1:
If Taro does activities in the order C, B, C, he will gain 70 + 50 + 90 = 210 points of happiness.

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