



(/en/),
v1.1.0

CSD Testing System

(/en/),

The grasshopper

Cost: 6 | Solved: 96

Memory limit: 256 MBs

Time limit: 1 s

Input: input.txt

Output: output.txt

Task:

Once upon a time there was a small lake in a mountain valley under the bright and clear sky. Several water lilies were floating on the smooth water surface of the lake. There was some amount of magic grass on every lily and a grasshopper was sitting on the first one. Everybody knows that grasshoppers in this valley love to feed themselves with magic grass. But our grasshopper can move in only one direction. He jumps across either one or two lilies. Every time the grasshopper reaches a lily he collects all the grass that lies on it. The grasshopper's goal is to collect the biggest amount of grass. You are given the quantity of lilies and how much grass there is on every lily. Write a programme which will count the biggest amount of grass that the grasshopper can get *after reaching the last lily*.



Input:

The first line contains a natural N – the quantity of lilies ($0 \leq N \leq 10^5$).

The second line contains N numbers where every T_i is equal to the amount of grass on the i th lily ($-10^9 \leq T_i \leq 10^9$).

Output:

The summary amount of grass that a grasshopper can collect, jumping across either one or two lilies only in the right direction.

Example:

Input	Output
5 3 -3 6 1 5	14
6 1 4 5 10 20 6	17