

Problem D - Elections

Today is the general election in the Netherlands. You want a certain party to win. You can recruit a_i new voters at hour i (starting now at 0). However, canvassing is so exhausting that you need to take a break every two hours at the latest. Your goal is to get as many new voters as possible.

Input

The input consists out of:

- One line with one integer $1 \leq n \leq 100000$, where n is the number of hours you have until the end of the election.
- n lines, each containing one integer, the i th of which being $1 \leq a_i \leq 1000$, the number of voters you gain by canvassing at hour i .

Output

The maximum number of voters you can get by promoting your party.

Sample Input 1	Sample Output 1
5 2 3 4 5 6	16