

## Problem F. Skyline

Input file: `skyline.in`  
Output file: `skyline.out`  
Time limit: 2 seconds  
Memory limit: 256 megabytes  
Detailed Feedback: none

You want to have in your city a beautiful skyline. You have decided to build  $N$  skyscrapers in a straight row. The  $i$ -th of them should have exactly  $h[i]$  floors.

You have got offers from different construction companies. One of them offers to build one floor in any of the skyscrapers for 3 Million Euros. The other one offers to build one floor in each of two neighbouring skyscrapers for 5 Millions in total. Note that it doesn't matter whether these floors are on the same height or not. The third one can build one floor in each of three consecutive skyscrapers for only 7 Millions.

You can build the floors in any order you want. Calculate the minimal possible total amount of money needed to finish the construction.

### Input

The first line contains integer number  $N$  ( $1 \leq N \leq 300$ ). The second line contains space separated  $N$  integer numbers,  $h[1], h[2], \dots, h[N]$ ,  $1 \leq h[i] \leq 200$ .

### Output

Output one integer number: the amount of money, in Millions.

### Examples

<code>skyline.in</code>	<code>skyline.out</code>
3 2 2 2	14
4 1 3 1 1	15