Maximum onion storage

Assignment 1
Computer Programming
Due date: 15 January, 2020

Problem Statement: There was price hike for onion in ByteLand as well and your friend has a way to buy onions at a cheaper rate and sell them at higher rate. But your friend cannot sell all the onions at a time, other wise government will be suspicious. So he build a storage house for onions. He got walls of negligible width strong enough to hold the onions between two such walls. But since he was in hurry to build the storage, he couldn't do it efficiently and ended up arranging these walls of different height in a random manner at a unit distance each. Since he is busy with the deal, he asks you to find how many onions can be stored in the storage that was built.

Note
In ByteLand, the onions are square in shape with each side a unit length. Also to a layer of onion can be stored if it is supported by two walls on each end.

Input
First line contains N, the number of walls. The next line contains N space separated intergers, indicating the height of the wall.
Output
Print the number of onions that can be stored.

Constraints
$0 \leq N \leq 10^6$
$1 \leq A[i] \leq 10^9$
Time Limit: 1 sec
Memory Limit: 256 MB

Sample Test Case

Input	Output
1 1	0
2 1 2	1
4 1 3 2 4	7