Ant Eaters 1 second, 32MB

Each day an anteater can eat at most 1,000 ants. If it eats that many ants, the next day it will not eat anything. You have the information on the number of ant available for the anteater to eat each day. Find out how many ants the anteater has eaten in total. You can assume that the day before the data you have, the anteater did not eat any ant.

Input

The first line of the input contains an integer N the number of days. (1<=N<=1,000) The second line

contains a list of N integers, the numbers of available ants in each day. The number of ants will not be more than 1,000,000.

Output

The output contains one integer, the number of ants that the anteater has eaten.

Example

Input	<u>Output</u>
5	2899
999 500 1000 500 400	

An anteater image by Malene Thyssen avaiable at https://commons.wikimedia.org/wiki/File:Myresluger2.jpg#/media/File:Myresluger2.jpg (CC BY-SA)