Sum of leaf nodes on the tree

Given N numbers, your task is to create the binary search tree and calculate the sum of leaf nodes in the tree.

Input Format

The first line is the number of elements $N(0 \le N \le 103)N(0 \le N \le 103)$.

The second line denotes the value of these elements with N positive integers.

The value of elements are positive integers ≤106≤106.

Output Format

Print the sum of leaf nodes in the tree.

Sample test

•	-	
Inn	11 † ^^	n
	utco	, i , v

6512768

outputcopy

16

Explanation for sample test

Example 1:

With the given numbers, the sum if 16.