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## Problem C. Array

Input file:            standard input  
Output file:          standard output  
Time limit:           3 seconds  
Memory limit:        256 megabytes

You are given an array  $a_1, a_2, \dots, a_n$ . Let  $x_1 = a_1$ , and  $x_i = x_{i-1} \bmod a_i$  for each  $i$  from 2 to  $n$ .  
Suppose that we can rearrange  $a_1, \dots, a_n$  in any way. What is the largest possible value of  $x_n$  we can obtain?

### Input

The first line contains an integer  $n$  — the size of the array ( $2 \leq n \leq 10^5$ ).

The second line containing  $n$  integers  $a_1, \dots, a_n$  ( $1 \leq a_i \leq 10^5$ ).

### Output

Print one integer — the largest possible value of  $x_n$ .

### Example

standard input	standard output
5 5 5 10 17 23	3