

Smallest element in array

Given an array A of N integer elements. It is required to find and output the smallest element in the array, output the original array.

Input

From the standard input device the number N ($1 \leq N \leq 1000$) is entered in the first line - the quantity of elements of array A . The second line contain N numbers elements of the array A ($-1000 \leq A_i \leq 1000$).

Output

In the first line print the smallest element in array A . In the second line, print the elements of the original array A , *printing a space after each element*.

Sample Input

```
9
5 4 -6 0 -3 -2 2 0 3
```

Sample Output

```
-6
5 4 -6 0 -3 -2 2 0 3
```