

Smallest positive number in an array

An array A of N integer elements is given. It is required to find and output the smallest positive number in an array, output the original array A .

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 separated by spaces - elements of the array A ($-1000 \leq A_i \leq 1000$).

Output

Print in the first line the smallest positive element in array A ; if it is absent, print "0" (*without quotes*). In the second line print the elements of array A , *printing a space after each element*.

Sample Input

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

Sample Output

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