

# Left Max

Input file:            `standard input`  
Output file:        `standard output`  
Time limit:         1 second  
Memory limit:      256 megabytes

Given a number  $N$  and an array  $A$  of  $N$  numbers, print the maximum in the range from 1 to  $i$  for each  $i \leq N$ .

**Note:** Solve this problem using recursion.

## Input

First line contains a number  $N$  ( $1 \leq N \leq 10^5$ ) number of elements.

Second line contains  $N$  numbers ( $-10^9 \leq A_i \leq 10^9$ ).

## Output

Print  $N$  numbers, the maximum from index 1 to index  $i$ .

## Example

standard input	standard output
5 4 3 5 7 3	4 4 5 7 7