

# List Minimum (Hard)

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**Time limit:** 0.4s    **Memory limit:** 256M  
Racket: 1.0s

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## Brute Force Practice 1 — Hard Version

You have a list of unique numbers each no larger than  $10^9$ . The size of the list is no greater than  $10^5$ . You perform the following operation on the list repeatedly: take the minimum of the numbers, and remove it from the list. You stop when the list is empty.

In what order are the numbers removed?

## Input Specification

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The first line will have the size of the list.

Each line after that will be an element of the list. You are guaranteed no two elements are the same.

## Output Specification

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Print one line for each time the operation was performed: the number that was removed at that step.

## Sample Input

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```
3
5
8
2
```

## Sample Output

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```
2
5
8
```