
Smurf

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

Ryan the King of Smurfs has $N \leq 200\,000$ smurfs. Each smurf is identified by a (possibly non-unique) integer. Ryan wants to reorganise the smurfs in a special way by placing them in a row.

He will perform the following steps N times,

1. Append the i -th smurf (integer) to the row.
2. Reverse the order of all the smurfs in the row currently.

Find the new order of smurfs after these N steps.

Input

The first line will be integer N ($N \leq 200000$).

The following line will be N integers ($\leq 10^9$), the i -th integer indicating the i -th smurf.

Output

Print N integers in a line with spaces in between, indicating the new order of the smurfs.

Scoring

Subtask	Score	N
1	30	$N \leq 1000$
2	70	$N \leq 200\,000$
3	0	Sample Testcase

Examples

standard input	standard output
4 1 2 3 4	4 2 1 3
3 1 2 3	3 1 2
6 0 1 2 1 2 0	0 1 1 0 2 2

Note

Explanation for Sample 1.

After step 1 of the first operation, the row becomes [1].

After step 2 of the first operation, the row becomes [1].

After step 1 of the second operation, the row becomes [1, 2].

After step 2 of the second operation, the row becomes [2, 1].

After step 1 of the third operation, the row becomes [2, 1, 3].

After step 2 of the third operation, the row becomes [3, 1, 2].

After step 1 of the fourth operation, the row becomes [3, 1, 2, 4].

After step 2 of the fourth operation, the row becomes [4, 2, 1, 3].

Thus the answer is 4 2 1 3