Task 1: `Hello`

Mr. Panda wants to welcome all the contestants taking part in this year's NOI but he is too lazy to welcome each contestant one by one. Hence, he wants to write a script that automatically generates a greeting given a contestant's name. However, he is too busy setting questions for the NOI. Can you help him write this script?

Input format

Your program must read from standard input.

The input contains a single username consisting of English alphabets. The username contains no other characters including spaces, and contains at most 10 letters.

Output format

Your program must print to standard output.

Your program should print a welcoming message "Hello [username]!" where the username should be replaced with the username from the input.

Sample Testcase 1

Input	Output
`Panda`	`Hello Panda!`

Sample Testcase 2

Input	Output
`Kitty`	`Hello Kitty!`

Task 2: `Sort`

Mr. Panda has managed to infiltrate into the NUS servers and plans to get information about the N questions in the upcoming NOI. Unfortunately, Mr. Panda's skills are not good enough to get the questions themselves. However, he is able to get information about the difficulty of each question. He also can change the order the questions that will come out for the actual NOI. Currently, the questions are not sorted in order of difficulty. To make his life easier, he would like to sort the questions in increasing order of difficulty from easiest to hardest.

Input format

Your program must read from standard input.

The first line of input contains a single integer N.

The next N lines of input will each contain one integer where the integer on the i-th line represents the difficulty of the i-th problem, 1 being the easiest and 10^9 being the hardest.

Output format

Your program must print to standard output.

Your program should print N lines with one integer each where the integer on the i-th line is the difficulty of the i-th easiest problem.

Subtasks

The maximum execution time on each instance is 1.0s.

For all subtasks, the difficulty of the problem will be between 1 and 10^9 inclusive.

Your program will be tested on sets of input instances as follows:

Subtask	Marks	Limits
1	12	$N = 2$
2	32	$1 \leq N \leq 1000$
3	56	$1 \leq N \leq 100000$

Sample Testcase 1

This testcase is valid for all subtasks.

Input	Output
2 1 2	1 2

Sample Testcase 2

This testcase is valid for subtasks 2-3.

Input	Output
5 293876 1000000000 13456 187 9876	187 9876 13456 293876 1000000000