#### Time limit: 1.0s Memory limit: 32M

Goran has five wooden pieces arranged in a sequence. There is a number between 1 and 5 inscribed on every piece, so that every number appears on exactly one of the five pieces.

Goran wants to order the pieces to form the sequence 1, 2, 3, 4, 5 and does it like this:

1. If the number on the first piece is greater than the number on the second piece, swap them.

- 2. If the number on the second piece is greater than the number on the third piece, swap them.
- 3. If the number on the third piece is greater than the number on the fourth piece, swap them.
- 4. If the number on the fourth piece is greater than the number on the fifth piece, swap them.
- 5. If the pieces don't form the sequence 1, 2, 3, 4, 5, go to step 1.

Write a program that, given the initial ordering of the pieces, outputs the ordering after each swap.

## **Input Specification**

The first line contains five integers separated by single spaces, the ordering of the pieces. The numbers will be between 1 and 5 (inclusive) and there will be no duplicates. The initial ordering will not be 1, 2, 3, 4, 5.

# **Output Specification**

After any two pieces are swapped, output the ordering of the pieces, on a single line separated by spaces.

### Sample Input 1

2 1 5 3 4

#### Sample Output 1

1 2 5 3 4 1 2 3 5 4 1 2 3 4 5

#### Sample Input 2

2 3 4 5 1

# Sample Output 2