

## Vector Shift

Write a program that takes in input N numbers. Numbers are stored in a vector.

Then you should follow these steps:

1. One position **left shift** of the vector. Every value of the vector should assume the value of the one next to its. The element N-1 will assume value 0.  
Example: V = 1 2 3 4  
Left Shift: V = 2 3 4 0
2. One position **right shift** of the vector. Every value of the vector should assume the value of the one previous to its. Element of index 0 will assume value 0.  
Example: V = 2 3 4 0  
Right Shift: V = 0 2 3 4

### Input

The first line contains a number N, the size of the array.

The second line contains the values of the array.

### Output

The first line contains the left shifted vector.

The second line contains the right shifted vector.

### Sample input

### Sample output

4 1 2 3 4	2 3 4 0 0 2 3 4
3 23 45 34	45 34 0 0 45 34
5 23 3 45 12 2	3 45 12 2 0 0 3 45 12 2