

## Jimmy's Carrots and the Lochness Monster

Jimmy the Jumpin' Jackrabbit likes to keep his carrots organized in a very particular manner, but the pesky Lochness Monster keeps shifting his carrot stashes around like so:

Jimmy has: `<3, 7, 15, 8, 10, 20>`

Lochness Monster's change: `<10, 20, 3, 7, 15, 8>`

Your job is to rearrange the carrots for Jimmy. Jimmy will provide you with the number of times that he would like you to shift his carrots and the direction that you should shift them (and of course \$3.50 for fixing all of his stashes). Jimmy will give you carrot information in the input file in groups of three. Each group will consist of three lines of input, starting with the number of spaces to shift each carrot. The next line will have the direction that you must shift the carrots, left or right. Finally, Jimmy will give you the current order of the carrots. You must output one line, with the shifted carrot order, for each group of input.

Sample Input:

```
1
right
4 5
3
left
9 2 1 3 7
```

Sample Output:

```
5 4
1 3 7 9 2
```