

Sandwich

Time limit: 1.0s **Memory limit:** 64M

You are about to make a delicious sandwich with N ($1 \leq N \leq 100\,000$) layers. You are going to put the sandwich together layer by layer. For each layer, you may choose to put it at either the bottom or the top of the currently made sandwich.

At the end of it all, you wish to observe your delicious sandwich – output the layers of the sandwich from top to bottom.

Input Specification

The integer N , followed by a sequence of `1`s and `0`s describing the process you followed creating the sandwich. The i^{th} character defines what you did with the $(i + 1)^{\text{th}}$ layer. `0` indicates you are putting the layer at the bottom of the sandwich, and `1` indicates you are putting it at the top.

Output Specification

The layers of the sandwich, in order from top to bottom.

Sample Input

```
5
00110
```

Sample Output

```
4
3
1
2
5
```