

## Goal

This challenge is a variant of challenge number 4 "Treasure Room". Here, your character lands in the middle of a corridor filled with gold coins and wealth multipliers. This corridor is represented by a string of characters (indeed, it is unidimensional), whose characters can be:

- o: gold coin, increases your wealth by 1
- \*: multiplier, double your wealth
- X: initial position of your character (this character appears exactly once)
  (There is no empty cell.)

The corridor is narrow, if a cell contains an object, and you want to access the part of the corridor which is behind, you are obliged to pick it up (and thus to activate its effect) if you want to free the passage. The goal is again to determine the sequence of movements that will allow you to maximize your loot.

#### Data

### Input

Row 1: an integer N between 1 and 100, representing the length of the corridor (number of characters in the chain).

Row 2: a string of length N, consisting of o, \* and x as indicated above.

#### Output

A string of characters, indicating the sequence of  $\circ$  and \* that your character will pick up in order if he or she moves to optimize the final loot.

# **Example**

With the following input:

```
*o*X**o
```

The expected output is  $*\circ * *\circ *$ , which corresponds to:

- first take the multiplier immediately to the left of the initial position;
- then take the gold coin on the left;
- then go to the right and pick up the 3 objects successively encountered until the end of the corridor;
- finally come back to the left end and take the last multiplier.

You can download sample input and output data files to work locally by clicking on the link at the bottom of the French version of the question.



Téléchargez des fichiers d'exemple ainsi qu'un modèle de code pour travailler localement.