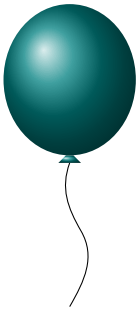
L Fake Square String



Time limit: 1.0s
Memory limit: 256MB

Carlos is building a string using the following three-step process:

- first, he starts from a string x;
- then, he concatenates x with itself;
- then, he inserts a character in any position of the string.

For example, Carlos can build the string `abcaacbca` in the following way:

- he chooses the string $x =$ `abca`;
- he gets $x + x =$ `abcaabca`;
- he inserts a new character `c`, getting the string `abcaacbca`.

You are given the final string, and you have to determine which character was added by Carlos in the last step of the process. You don't need to determine in which position it was added.

Input

The first line contains an integer n ($1 \leq n \leq 2 \cdot 10^5$) — the length of the final string.

The second line contains the final string s of length n, consisting of lowercase English characters.

It is guaranteed that, for the given input, the string s can be obtained by Carlos using the process described above.

Output

Output a single line, containing the character added by Carlos in the last step of the process.

Samples

Sample input 1	Sample output 1
9 abcaacbca	c

Explanation of sample 1.
The first sample is described in the statement. Since Carlos inserted the character `c` in the last step, you have to output `c`.

Sample input 2	Sample output 2
1 i	i

Explanation of sample 2.

- Carlos chooses the empty string $x =$ "";
- Carlos gets $x + x =$ "";
- Carlos inserts a new character i, getting the string i.

Sample input 3	Sample output 3
7 rrrrrrr	r

Explanation of sample 3.

- Carlos chooses the string $x =$ rrr;
- Carlos gets $x + x =$ rrrrrr;
- Carlos inserts a new character r, getting the string rrrrrrr.