Ada has a midterm coming up and she wants to skim the textbook of the course as quickly as possible to prepare for it. To save time, she decides not to read anything that is written in parentheses, thinking that whatever is written in there must be of little importance. Help her shorten the $N$ characters long paragraph by replacing the parentheses in the paragraph and the text between them with ellipses! ($\ldots$)

The parentheses in the text will be balanced, i.e., each left parenthesis will have a matching right parenthesis and the pairs of parentheses will be properly nested.

**Input**

The first line contains a single integer $N$.

The second line consists of one string $S$ of length $N$. The string consists of English letters, spaces, and the characters !"#$%

\[ (\ldots) \]

\[ A \text{ constant (non-random) variable has zero variability.} \]

\[ A \text{ constant } \ldots \text{ variable has zero variability.} \]

**Examples**

Input 1:

```
54
A constant (non-random) variable has zero variability.
```

Output 1:

```
A constant \ldots variable has zero variability.
```

Input 2:

```
Time Limit: 2.0s  Memory Limit: 256M
```

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I must explain to you how all this (the (fallacious and misguided) idea of denouncing pleasure) was born. I will give you a complete account of the system (and expound the (actual) teachings of the great explorer of the truth, the master-builder of human happiness) as no one rejects (or avoids) pleasure itself because it is pleasure, but because those who don't know how to pursue pleasure (in a rational way) encounter consequences that are painful.