Problem D. D- string

Time limit 2000 ms **Mem limit** 262144 kB

Problem Statement

The word internationalization is sometimes abbreviated to i18n. This comes from the fact that there are 18 letters between the first i and the last n.

You are given a string s of length at least 3 consisting of lowercase English letters. Abbreviate s in the same way.

Constraints

- $3 \leq |s| \leq 100$ (|s| denotes the length of s.)
- ullet s consists of lowercase English letters.

Input

Input is given from Standard Input in the following format:

s

Output

Print the abbreviation of *s*.

Sample 1

Input	Output
internationalization	i18n

Sample 2

Input	Output
smiles	s4s

Sample 3

Input	Output
xyz	x1z