## **Problem: Way Too Long Words**

**Time Limit:** 1 second  
**Memory Limit:** 256 MB

### **Problem Statement**

Sometimes, writing long words can be tiresome. To make things easier, Polycarp decided to abbreviate long words. The abbreviation of a word is made by replacing the middle letters with the count of those letters. Specifically, if a word has more than 10 characters, it is abbreviated as follows:

* The first letter of the word.
* The number of letters between the first and last letter.
* The last letter of the word.

For example, the word "localization" becomes "l10n", and the word "internationalization" becomes "i18n".

Given a list of words, your task is to write a program that replaces each word longer than 10 characters with its abbreviation. If a word has 10 or fewer characters, it should remain unchanged.

### **Input**

* The first line contains an integer **n** (1 ≤ n ≤ 100) — the number of words.
* Each of the next **n** lines contains a single word consisting of lowercase and uppercase English letters. The length of each word is between 1 and 100 characters, inclusive.

### **Output**

* Print **n** lines. The **i-th** line should contain the abbreviation of the **i-th** word if its length is greater than 10. Otherwise, print the word unchanged.

### **Subtasks**

* **Subtask 1 (30 points):**
  + 1 ≤ n ≤ 10
  + Each word has at most 100 characters.
* **Subtask 2 (70 points):**
  + Original constraints.

### **Examples**

**Example 1**

arduino

Copy code

Input:

4

word

localization

internationalization

pneumonoultramicroscopicsilicovolcanoconiosis

Output:

word

l10n

i18n

p43s

**Explanation:**

* "word" has 4 characters, so it remains unchanged.
* "localization" has 12 characters. Its abbreviation is "l10n" (12 - 2 = 10 middle characters).
* "internationalization" has 20 characters. Its abbreviation is "i18n" (20 - 2 = 18 middle characters).
* "pneumonoultramicroscopicsilicovolcanoconiosis" has 45 characters. Its abbreviation is "p43s" (45 - 2 = 43 middle characters).