Hiding the Card Number

Your task is to write a program that takes a string and returns a new string with its first and last characters swapped, except under two conditions:

- 1. If the length of the string is less than two, return "Incompatible.".
- 2. If the first and last characters are the same, return "Two's a pair.".

Notes

Tests are case sensitive (e.g. "A" and "a" are not the same character).

Input

The first line of input contains the string S.

Output

The first line contains the string with its first and last characters swapped.

Sample input

Sample output

Cat, dog, and mouse.	*********5678
ada	Two's a pair.
z	Incompatible.