

Mr. Ian is a past contestant of NOI and he has an interest in playing games with the letters 'n', 'o' and 'i'. Initially his friend Ms.Nio gives him a random string(text) which only contains the letters 'n', 'o' and 'i'. Then he performs the following operations on the string Find an even substring that only contains one character type('n'/'o'/'i') Removes it from the original string to make a new string Continue step 1 with the new string until there are no even substrings of same character type('n'/'o'/'i') or the resulting string is empty

After all the operations Mr. Ian comes up with the resulting string. Having a programming background Mr. Ian wishes to make his task easy by using a program. Your task is to help Ian find the resulting string after following the above operations

Input Format

One line containing a string of length N that has only lowercase characters 'n', 'o' and 'i'

Constraints

5 <= N <= 100 000

Output Format

A single line containing the resulting string If the resulting string is empty print -1

Sample Input 0

```
nonooni
```

Sample Output 0

```
noi
```

Sample Input 1

```
noooiion
```

Sample Output 1

```
-1
```

Explanation 1

- First ii are removed
- Then the string is nooon
- Then oooo is removed
- Now resulting string is nn

- Finally nn is removed

Sample Input 2

```
nnooinnnnnoinoiinn
```

Sample Output 2

```
ioi
```