

Problem A

Problem C

The English language is infamous for having an inconsistent spelling system. One feature in the spelling system that you are interested in is the usage of the letter *c*. The letter *c* can be pronounced in multiple different ways, which might be confusing for the speaker. However, there are some simplified patterns to help speakers determine which pronunciation to use.

- It is pronounced as ⟨k⟩ if it is either: followed by *a*, *o*, or *u*; followed by a consonant letter other than *h* and *y*; or at the end of a word. The consonant letters are the English letters excluding the vowel letters: *a*, *e*, *i*, *o*, and *u*.
- It is pronounced as ⟨s⟩ if it is followed by *e*, *i*, or *y*.
- The pair of adjacent letters *ch* is pronounced with a unique sound ⟨c⟩.

You are given N words: S_1, S_2, \dots, S_N . For each given word, simplify the spelling system by replacing every occurrence of *c* into *k* or *s* (for the sound ⟨k⟩ and ⟨s⟩ respectively) according to the patterns above and every occurrence of *ch* into *c*.

Input

The first line consists of an integer N ($1 \leq N \leq 100$).

Each of the next N lines consists of a string S_i . String S_i consists of only lowercase English letters, and its length is between 1 and 100.

Output

For each word, output a single line containing a string that represents the simplified spelling system of string S_i according to the patterns above.

Sample Input #1

```
10
cyan
circle
ceramic
coccyx
delicacy
chacha
coach
blackjack
church
hiccup
```

Sample Output #1

```
syan  
sirkle  
seramik  
koksyx  
delikasy  
caca  
koac  
blakkjakk  
curc  
hikkup
```

Sample Input #2

```
6  
caesar  
cillian  
celtic  
character  
chef  
echelon
```

Sample Output #2

```
kaesar  
sillian  
seltik  
carakter  
cef  
ecelon
```

Sample Input #3

```
4  
cacbccdcefcgchcicjckclcmncocpcqcrsctcucvcwxcyczc  
abcdefghijklmnopqrstuvwxy  
cchh  
cc
```

Sample Output #3

```
kakbkkkdsekfkgsikjkkklmknkokpkqrksktkukvkwxsyzk  
abcdefghijklmnopqrstuvwxy  
kch  
kk
```