2. Bingeaux was his name-eaux

Program Name: Bingeaux.java   **Input File: bingeaux.dat**

As editor for a baby-naming dictionary, you wish to write a program that will determine variants for a given name. You know some common name variant rules:

Original name containing	Replaced with
ph	f
ai not at end of name	ay
any letter appearing exactly twice in a row (but not more than twice consecutively)	a single occurrence of that letter
o at end of name	eaux

Note that one and only one change is made to the original name to determine a variant. E.g., the variants of "jennifer" would be "jenifer" but not "jennipher" nor "jeniper". However, the name "jenny" or "jennnny" would have no variants, as there are 3 n's and 4 n's respectively that appear consecutively. The two variants of "kailail" are "kailayl" and "kaylail" in alphabetical order.

Input
- The first line will be a single integer n that indicates the number of data sets in the input.
- Each data set will consist of a single line containing a name of 1-20 lowercase letters.

Output
For each data set in the input, output the original name, followed by an alphabetized list of variants for the given name, with each name and name variant on a separate line.

Example Input File
```
9
joseph
kailail
hai
thibodo
jennifer
timothy
yarrghtheviking
yarrrghtheviking
jarrrghthemanofjello
```

Example Output to Screen
```
joseph
josef
kailail
kailayl
kaylail
hai
thibodo
thibodeaux
jennifer
jenifer
timothy
yarrghtheviking
yarghtheviking
yarrrghtheviking
jarrrghthemanofjello
jarrrghthemanofjelleaux
jarrrghthemanofjelo
```