10. Txtspk

To save time when sending text messages, many people abbreviate what they are trying to say. One such way is to perform the following steps:

- 1. Remove all punctuation from the message. For this program, any non-alphanumeric, non-whitespace character is considered punctuation.
- 2. Convert all uppercase letters to lowercase.
- 3. Remove all vowels (a,e,i,o,u) from any word (contiguous unit of alphanumeric characters) of four alphanumeric characters or more.

Input

The first line of input will contain a single integer, n, indicating the number of data sets to process. The remainder of the input consists of those n data sets.

Each data set will consist of a single line containing a message (1-80 characters) to convert.

Output

For each data set in the input display the text message resulting from applying the above steps.

Example Input File

3
Tim, do you want to go grab a pizza?
Dear John, I am leaving you.
I will meet you at the theatre at 9!

Example Output To Screen

tim do you wnt to go grb a pzz dr jhn i am lvng you i wll mt you at the thtr at 9