

Problem A

Vowel Count

Dr. Orooji noticed that his name has more vowels than consonants. Since he likes meeting people like himself, he has asked you to write a program to help him identify such names.

Given a name, determine whether or not it has more vowels than consonants. Assume the vowels are "aeiou".

Input

The first input line contains a positive integer, n , indicating the number of names to check. The names are on the following n input lines, one name per line. Each name starts in column 1 and consists of 1-20 lowercase letters (assume the name will not contain any other characters).

Output

Output each name on a separate line as it appears in the input followed by a 1 (one) or 0 (zero) on the next line indicating whether or not it has more vowels than consonants. Follow the format illustrated in Example Output.

Examples

Input	Output
4	ali
ali	1
arup	arup
travis	0
orooji	travis
	0
	orooji
	1