Problem
Cantonese
Time limit: 2 seconds

Little Cyan Fish likes different languages very much. Today, he wants to introduce you Cantonese.

Cantonese syllables can be written with Latin letters using **Jyutping**[*]. He gives you a string s and asks whether it is the spelling of **one valid Cantonese syllable without a tone number**.

For this problem, the complete rules are given by the following table. Each column is an **initial**, the part at the beginning of a syllable, and each row is a **final**, the remaining part. The column labeled ∅ represents an empty initial, which contributes no letters. A cell containing **1** means that the initial and final can be combined; a cell containing **0** means that they cannot. A valid spelling is obtained by concatenating a column's initial and a row's final whose cell contains 1, in that order. No other spellings are valid.

The final includes its vowel and any ending consonant. The finals `m` and `ng` are special nasal sounds that can form syllables without a vowel; their allowed combinations are also included in the table. Only the letters shown in the table are written: there are no spaces, separators, or tone numbers.

For example, `ngaan` and `zeoi` are valid spellings, while `chong` is not. Help Little Cyan Fish check his spelling.

Final	∅	b	p	m	f	d	t	n	l	g	k	ng	h	gw	kw	w	z	c	s	j
aa	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
aai	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
aau	1	1	1	1	0	0	0	1	1	1	1	1	1	0	0	0	1	1	1	1
aam	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	1	1	1	0
aan	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	0
aang	1	1	1	1	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1
aap	1	0	0	0	0	1	1	1	1	1	0	1	1	0	0	0	1	1	1	1
aat	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	0
aak	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
a	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
ai	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
au	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1
am	1	1	0	1	0	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1
an	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ang	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
ap	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1
at	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1
ak	1	1	0	1	0	1	0	1	1	1	1	1	1	0	0	0	1	1	1	0
e	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1
ei	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	0	0	0	1	0
eu	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0
em	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
en	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
eng	0	1	1	1	0	1	1	0	1	1	0	0	1	0	0	0	1	1	1	1
ep	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0
et	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
ek	0	1	1	0	0	1	1	0	1	0	1	0	1	0	0	0	1	1	1	0
i	0	1	0	1	0	1	1	1	1	1	0	0	1	1	0	1	1	1	1	1
iu	0	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1
im	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1
in	0	1	1	1	0	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1
ing	0	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1
ip	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1
it	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1
ik	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
o	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1

[*]To keep it simple, in this task, Little Cyan Fish has removed the tone numbers from his notes

Final	∅	b	p	m	f	d	t	n	l	g	k	ng	h	gw	kw	w	z	c	s	j
oi	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	1	1	1	0
ou	1	1	1	1	0	1	1	1	1	1	0	1	1	0	0	0	1	1	1	0
on	1	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0
ong	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
ot	1	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0
ok	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
oe	0	0	0	0	0	1	1	0	1	1	1	0	1	0	0	0	1	0	1	0
oeng	0	0	0	0	0	1	0	1	1	1	1	0	1	0	0	0	1	1	1	1
oet	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0
oek	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	1	1	1	1
eoi	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1
eon	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	1	1	1	1
eot	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	1	1	0
u	0	0	0	0	1	0	0	0	0	1	1	0	0	1	1	1	0	0	0	0
ui	0	1	1	1	1	0	0	0	0	1	1	0	0	1	1	1	0	0	0	0
um	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
un	0	1	1	1	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0
ung	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1
up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ut	0	1	1	1	1	1	0	0	0	1	1	0	0	1	1	1	0	0	0	0
uk	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1
yu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
yun	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1
yut	0	0	0	0	0	1	1	0	1	1	1	0	1	0	0	0	1	1	1	1
m	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
ng	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0

Table adapted from the Linguistic Society of Hong Kong's Cantonese Pronunciation List of the Characters for Computers (CC BY 4.0), with the additions described in the Jyutping scheme and its 2018 expansion. The cells above define the spellings accepted in this problem.

Input

The first line contains an integer T ($1 \leq T \leq 10^5$), the number of test cases.

The only line of each test case contains a string s ($1 \leq |s| \leq 6$), consisting only of lowercase letters (`a` to `z`).

Output

For each test case, output `Yes` if s is a valid spelling, and `No` otherwise.

Sample Input 1

```
5
ngaan
zeoi
chong
jaai
pak
```

Sample Output 1

```
Yes
Yes
No
Yes
No
```