Name of Restaurant

Daniel and Jan were opening a brand-new restaurant. The name of the restaurant was an essential factor to consider, and they wanted it to be unique and memorable. They had heard that palindrome names were eye-catching and memorable so they thought it would be great if they could choose a palindrome name for their restaurant too. However, after brainstorming many ideas, they couldn't find a good palindrome name that would fit their restaurant.

Then, they came up with a new idea. What if they could make their phone number a palindrome by using the letters printed on a phone keypad to spell out their restaurant's name? After some research, they found out that certain combinations of letters on a phone keypad could form a palindrome.

To find such a palindrome name for their restaurant, they asked you to write a program that would take in a list of words and output the palindrome name that would generate a palindrome phone number. The program would consider only the letters that correspond to the numbers on a phone keypad, and it would ignore any other characters like spaces or punctuation marks.

Input

The input for this program consists of multiple lines, where the first line contains a positive integer representing the total number of company names that will follow. Each subsequent line will contain the name of a company, which will be a string of characters with a maximum length of 20. The company name may consist of uppercase or lowercase letters.

Output

Output the results for each company name on a separate line. If the phone number generated from the company name is a palindrome, print YES on that line. If the phone number is not a palindrome, print NO instead.

Sample Input
```
2
lAfaJ
bufetFRI
```

Sample Output
```
YES
NO
```