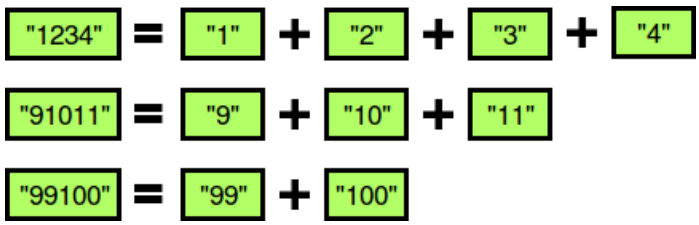
Separate the Numbers

A numeric string, s, is *beautiful* if it can be split into a sequence of two or more positive integers, $a[1], a[2], \ldots, a[n]$, satisfying the following conditions:

1. $a[i] - a[i-1] = 1$ for any $1 < i \leq n$ (i.e., each element in the sequence is 1 more than the previous element).
2. *No $a[i]$ contains a leading zero.* For example, we can split $s = 10203$ into the sequence $\{1, 02, 03\}$, but it is *not* beautiful because 02 and 03 have leading zeroes.
3. *The contents of the sequence cannot be rearranged.* For example, we can split $s = 312$ into the sequence $\{3, 1, 2\}$, but it is not beautiful because it breaks our first constraint (i.e., $1 - 3 \neq 1$).

The diagram below depicts some beautiful strings:



Perform q queries where each query consists of some integer string s. For each query, print whether or not the string is beautiful on a new line. If it is beautiful, print `YES x`, where x is the first number of the increasing sequence. If there are multiple such values of x, choose the smallest. Otherwise, print `NO`.

Function Description

Complete the *separateNumbers* function in the editor below.

separateNumbers has the following parameter:

- *s*: an integer value represented as a string

Prints
- *string:* Print a string as described above. Return nothing.

Input Format

The first line contains an integer q, the number of strings to evaluate.
Each of the next q lines contains an integer string s to query.

Constraints

- $1 \leq q \leq 10$
- $1 \leq |s| \leq 32$
- $s[i] \in [0 - 9]$