

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, \dots, 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:

$$\begin{aligned}
 \boxed{\text{"1234"}} &= \boxed{\text{"1"}} + \boxed{\text{"2"}} + \boxed{\text{"3"}} + \boxed{\text{"4"}} \\
 \boxed{\text{"91011"}} &= \boxed{\text{"9"}} + \boxed{\text{"10"}} + \boxed{\text{"11"}} \\
 \boxed{\text{"99100"}} &= \boxed{\text{"99"}} + \boxed{\text{"100"}}
 \end{aligned}$$

You must perform q queries, where each query consists of some string s . For each query, print whether or not the string is beautiful on a new line. If it's 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** instead.

Input Format

The first line contains an integer denoting q (the number of strings to evaluate). Each of the q subsequent lines contains some string s for a query.

Constraints

- $1 \leq q \leq 10$
- $1 \leq |s| \leq 32$
- Each character in s is a decimal digit from 0 to 9 (inclusive).

Output Format

For each query, print its answer on a new line (i.e., either **YES x** where x is the smallest first number of the increasing sequence, or **NO**).

Sample Input 0

```

7
1234
91011
99100
101103
010203
13
1

```

Sample Output 0

```

YES 1

```

YES 9
YES 99
NO
NO
NO
NO

Explanation 0

The first three numbers are beautiful (see the diagram above). The remaining numbers are not beautiful:

- For $s = 101103$, all possible splits violate the first and/or second conditions.
- For $s = 010203$, it starts with a zero so all possible splits violate the second condition.
- For $s = 13$, the only possible split is $\{1, 3\}$, which violates the first condition.
- For $s = 1$, there are no possible splits because s only has one digit.