Problem H. Easiest Problem Ever

Time Limit 1000 ms

Mem Limit 262144 kB

Kevin is trapped in Lakeside Village by Grace. At the exit of the village, there is a combination lock that can only be unlocked if Kevin solves it.

The combination lock starts with an integer x. Kevin can perform one of the following two operations zero or more times:

1. If $x \neq 33$, he can select two consecutive digits 3 from x and remove them simultaneously. For example, if $x = 13\,323$, he can remove the second and third 3, changing x to 123.
2. If $x \geq 33$, he can change x to $x - 33$. For example, if $x = 99$, he can choose this operation to change x to $99 - 33 = 66$.

When the value of x on the combination lock becomes 0, Kevin can unlock the lock and escape from Lakeside Village. Please determine whether it is possible for Kevin to unlock the combination lock and escape.

Input

Each test contains multiple test cases. The first line contains the number of test cases t ($1 \leq t \leq 10^4$).

The only line of each test case contains a positive integer x ($1 \leq x \leq 10^9$).

Output

For each test case, output "YES" or "NO" (without quotes) in one line, representing whether Kevin can unlock the combination lock and escape. You can output the answer in any case (upper or lower). For example, the strings "yEs", "yes", "Yes", and "YES" will be recognized as positive responses.

Examples

Input	Output
5 165 6369 666 114514 133333332	YES YES NO NO YES

Note

For the first test case, $165 \xrightarrow{-33} 132 \xrightarrow{-33} 99 \xrightarrow{-33} 66 \xrightarrow{-33} 33 \xrightarrow{-33} 0$.

For the second test case, $6369 \xrightarrow{-33} 6336 \xrightarrow{\text{remove "33"}} 66 \xrightarrow{-33} 33 \xrightarrow{-33} 0$.

For the third test case, it can be proven that, regardless of the operations performed, 666 cannot be transformed into 0.