Submit:	`reverse.c` / `reverse.cpp` / `reverse.pas`	Time limit:	on the order of seconds
Input:	`reverse.in`	Memory limit:	32 MB
Output:	`reverse.out`	Points:	100

Lots of numbers have many interesting properties. In this task we will take a look at one such property. First let's define the reverse of a number: The reverse of a number N with decimal notation $\overline{a_n \ldots a_1 a_0}$ is the number $\overline{a_0 a_1 \ldots a_n}$ (i.e., the number obtained by writing the digits of N in reverse order). We will denote the reverse of a number N as $Rev(N)$. For example $Rev(123) = 321$ and $Rev(7400) = 47$.

You will be given several natural numbers. For each of them your task will be to decide whether it is equal to $N + Rev(N)$ for some natural number N.

Input: The input file `reverse.in` will consist of up to 10 001 lines. On each line there will be one positive number with less than 10 000 digits. The last line of the input file contains the number 0. This number should not be processed.

Output: For each number M in the input file the output file `reverse.out` shall contain one line with the word "YES" (if for some N we have $M = N + Rev(N)$) or "NO" (otherwise).

Example:

`reverse.in`	`reverse.out`
1	NO
2	YES
11	YES
13	NO
14003	YES
767513456469789456166547987979741366664879441	NO
0	