



## Problem D. Dividing Hexadecimal Numbers

Source file name:      dividing.c, dividing.cpp, dividing.java  
Input:                    Standard  
Output:                  Standard  
Author(s):              Gilberto Vargas Hernández

Mr. Homft promised not to let homework to the kids that could accomplish a task in class. Today's lecture was about hex numbers. Hex numbers were invented by the lazy computer scientists from the last century who didn't want to write a lot of zeros and ones, so they synthesized binary into hex numbers. For a binary number it's possible to form groups of 4 bits and replace them by the hex digit. An easy way to convert from hex to binary! A hex digit is represented as a number from 0 to 9 or an uppercase letter from *A* to *F* which represents numbers from 10 to 15.

Mr. Homft's class is integrated only by smart kids, so don't get scared by their abilities. The last month they were studying Newton's laws, number theory and some other kind of sorcery tricks.

Well, now that everything has been explained let's go to Mr. Homft's problem. He wrote a hex number *N*, actually a really huge one, and then he asked if the number was a multiple of 17. Passed no more than 5 minutes, all the kids had answered to the question correctly. You may be wondering if you must have taken the sorcery course last summer to calculate the result but maybe what you need is a different course. Can you answer correctly as the kids? Given a set of hex numbers your task is to say whether they are or not multiples of 17.

### Input

You'll have to read until end of file. Each line of input will have the hex number *N*.

- *N* will have at most  $10^5$  hex digits.

### Output

For each line of input, write "yes" if the hex number is divisible by 17, write "no" otherwise

### Example

Input	Output
9999	yes
11	yes
AA	yes
0	yes
1	no