Problem K: Upside down primes

Last night, I must have dropped my alarm clock. When the alarm went off in the morning, it showed `51:80` instead of `08:15`. This made me realize that if you rotate a seven segment display like it is used in digital clocks by 180 degrees, some numbers still are numbers after turning them upside down.

Figure K.1: Prime number 18115211 on a seven segment display (see third sample).

Figure K.2: 18115211 turned upside down (i.e. rotated by 180 degrees) gives 11251181, which is not prime.

As you can see,

-  , and  still are , and .
-  is still readable as  (only moved left).
-  turns into  , while  turns into .
-  ,  and  are no longer valid numbers ( ,  and)

My favourite numbers are primes, of course. Your job is to check whether a number is a prime and still a prime when turned upside down.

Input

One line with the integer N in question ($1 \leq N \leq 10^{16}$). N will not have leading zeros.

Output

Print one line of output containing "`yes`" if the number is a prime and still a prime if turned upside down, "`no`" otherwise.

Sample Input 1

```
151
```

Sample Output 1

```
yes
```

Sample Input 2

```
23
```

Sample Output 2

```
no
```

Sample Input 3

```
18115211
```

Sample Output 3

```
no
```