#codefor15

Challenge 13.2
Panoramix's Prediction

A prime number is a number which has exactly two distinct divisors: one and itself. For example, numbers 2, 7, 3 are prime, and 1, 6, 4 are not.

*The next prime number after x is the **smallest** prime number greater than x. For example, the next prime number after 2 is 3, and the next prime number after 3 is 5. Note that there is exactly one next prime number after each number. So 5 **is not** the next prime number for 2.*

One cold April morning Panoramix predicted that soon Kakofonix will break free from his straitjacket, and this will be a black day for the residents of the Gallic countryside.

Panoramix's prophecy tells that if some day Asterix and Obelix beat exactly x Roman soldiers, where x is a prime number, and next day they beat exactly y Roman soldiers, where y is **the next prime number** after x, then it's time to wait for Armageddon, for nothing can shut Kakofonix up while he sings his infernal song.

Yesterday the Gauls beat n Roman soldiers and it turned out that the number n was prime! Today their victims were a troop of m Romans ($m > n$). Determine whether the Gauls should wait for the black day after today's victory of Asterix and Obelix?

INPUT

The first and only input line contains two positive integers — n and m ($2 \le n < m \le 50$). It is guaranteed that n is prime.

Pretests contain all the cases with restrictions $2 \le n < m \le 4$.

OUTPUT

Print `YES`, if m is the next prime number after n, or `NO` otherwise.

Examples

input

```
3 5
```

output

```
YES
```

input

```
7 11
```

output

```
YES
```

input

```
7 9
```

output

```
NO
```