F. Panoramix's Prediction

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

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 Copy

```
3 5
```

output Copy

```
YES
```

input Copy

```
7 11
```

output Copy

```
YES
```

input Copy

```
7 9
```

output Copy

```
NO
```

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Group website

→ Group Contests

- Week 4 Sheet (General #1)
- Week #3 Contest
- Practice (Data types, Arithmetic operators, Conditions, Loops)
- Week 3 Sheet (Loops)
- Week #2 Contest
- Week 2 Sheet (Conditions)
- Week #1 Contest
- Week 1 Sheet (Data types, Arithmetic operators)

Week 4 Sheet (General #1)

Contest is running

5 days