X. Panoramix's Prediction

time limit per test: 2 seconds❷
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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- Sheet #10 (General Hard)
- Sheet #9 (General medium)
- Sheet #8 (General easy)
- Sheet #7 (Recursion)
- Sheet #6 (Math - Geometry)
- Sheet #5 (Functions)
- Sheet #4 (Strings)
- Contest #3.1
- Sheet #3 (Arrays)
- Contest #2
- Sheet #2 (Loops)
- Contest #1
- Sheet #1 (Data type - Conditions)

Sheet #8 (General easy)
Finished