## Problem C: Pseudoprime numbers

Fermat's theorem states that for any prime number *p* and for any integer *a > 1*, *ap == a (mod p)*. That is, if we raise *a* to the *p*th power and divide by *p*, the remainder is *a*. Some (but not very many) non-prime values of *p*, known as *base-a pseudoprimes*, have this property for some *a*. (And some, known as Carmichael Numbers, are base-a pseudoprimes for all *a*.)

Given *2 < p ≤ 1,000,000,000* and *1 < a < p*, determine whether or not *p* is a *base-a pseudoprime*.

Input contains several test cases followed by a line containing "0 0". Each test case consists of a line containing *p* and *a*. For each test case, output "yes" if p is a base-a pseudoprime; otherwise output "no".

**Sample Input**

3 2

10 3

341 2

341 3

1105 2

1105 3

0 0

**Output for Sample Input**

no

no

yes

no

yes

yes

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