

A prime number is a natural number greater than **1** whose only positive divisors are **1** and itself. For example, the first six prime numbers are **2, 3, 5, 7, 11**, and **13**.

Given a large integer, ***n***, use the Java *BigInteger* class' [isProbablePrime](#) method to determine and print whether it's prime or not prime.

Input Format

A single line containing an integer, ***n*** (the number to be checked).

Constraints

- ***n*** contains at most **100** digits.

Output Format

If ***n*** is a prime number, print `prime`; otherwise, print `not prime`.

Sample Input

13

Sample Output

`prime`

Explanation

The only positive divisors of **13** are **1** and **13**, so we print `prime`.