

# Java Primality Test

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**.