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`.