

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`.