

# PRIME

Time Limit = 1s, Memory Limit = 32768KB

A prime number is a natural number which has exactly two distinct natural number divisors: 1 and itself. The first prime number is 2. Can you write a program that computes the nth prime number, given a number  $n \leq 10000$ ?

## Input

The input contains just one number which is the number  $n$  as described above.

The maximum value of  $n$  is 10000.

## Output

The output consists of a single line with an integer that is the nth prime number.

## Sample Input

30

## Sample Output

113