TASK 1: PRIME

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 n^{th} prime number, given a number $n \leq 10000$?

Input File: `PRIME.IN`

The input file PRIME.IN contains just one number which is the number n as described above. The maximum value of n is 10000.

Example

```
30
```

Output File: `PRIME.OUT`

The output file consists of a single integer that is the n^{th} prime number.

Example

The output file for the example above contains the number

```
113
```

because 113 is the 30^{th} prime number.