

# Nearest Prime Number

Given an integer  $n$  ( $2 \leq n \leq 10^{12}$ ). Find the highest possible integer  $p$  such that  $p \leq n$  and  $p$  is a prime.

## Input

The first and only line contains the integer  $n$ .

## Output

One line contains the integer  $p$ .

## Example

**Input:**

10

**Output:**

7