Consecutive non-primality **P57148_en**

Tercer Concurs de Programació de la UPC - Final (2005-09-28)

For every natural number x, define $N(x)$ as the smallest natural number y such that $y \geq x$ and such that the 250 consecutive numbers $y, y+1, \ldots, y+249$ are all non-prime.

Your program must print $N(x)$ for every given x.

Input

Input consists of several (probably many) natural numbers x, each one such that $N(x) < 10^9$.

Output

For every x, print x and $N(x)$ in one line.

Sample input

```
1234
436273033
```

Sample output

```
1234 436273010
436273033 436273033
```

Problem information

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