Project Euler #7: 10001st prime

This problem is a programming version of Problem 7 from projecteuler.net

By listing the first six prime numbers: $2, 3, 5, 7, 11$ and 13, we can see that the 6^{th} prime is 13.
What is the N'th prime number?

Input Format
First line contains T that denotes the number of test cases. This is followed by T lines, each containing an integer, N.

Output Format
Print the required answer for each test case.

Constraints
$1 \le T \le 10^3$
$1 \le N \le 10^4$

Sample Input

```
2
3
6
```

Sample Output

```
5
13
```