

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 6th 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

$$1 \leq T \leq 10^3$$

$$1 \leq N \leq 10^4$$

Sample Input

```
2
3
6
```

Sample Output

```
5
13
```