

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** .

Constraints

- $1 \leq T \leq 10^3$
- $1 \leq N \leq 10^4$

Output Format

Print the required answer for each test case.

Sample Input 0

```
2
3
6
```

Sample Output 0

```
5
13
```

Explanation 0

The first **10** prime numbers are

{2, 3, 5, 7, 11, 13, 17, 19, 23, 29}

we can see that **3rd** prime number is **5** and **6th** prime number is **13**