11960   Divisor Game

Steve is playing a game with numbers. He picks up a random positive number N and finds the largest positive number not bigger than N that has the most divisors. As N becomes larger it's more and more difficult for Steve to avoid mistakes when counting the divisors and he asks you to write a program. You argue that it is a very easy task to just find the divisors and suggest that you could solve the original task of Steve as well.

Input

You are given a number of tests T ($T \leq 50000$). Each test on a single line specifies a number N ($1 \leq N \leq 10^6$).

Output

You need to find the largest number not bigger than N that has the most divisors. For each test output one line containing the answer to the game.

Sample Input

```
3
1
10
37
```

Sample Output

```
1
10
36
```