Project Euler #179: Consecutive positive divisors



This problem is a programming version of Problem 179 from projecteuler.net

Find the number of integers 1 < n < k, for which n and n+1 have the same number of positive divisors. For example, 14 has the positive divisors 1, 2, 7, 14 while 15 has 1, 3, 5, 15.

Input Format

First line of input contains single integer t which is the number of testcases. All of the following t lines contain single integer t each.

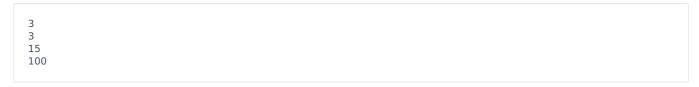
Constraints

- $1 < t < 10^6$
- $3 \le k \le 10^7$

Output Format

For each testcase output the only integer which is the answer to the problem.

Sample Input 0



Sample Output 0



Explanation 0

The only n < 15 are 2 and 14.