T-primes

We know that prime numbers are positive integers that have exactly two distinct positive divisors. Similarly, we'll call a positive integer *tТ-prime*, if *t* has exactly three distinct positive divisors.

You are given an array of *n* positive integers. For each of them determine whether it is Т-prime or not.

**Input**

The first line contains a single positive integer, *n* (1 ≤ *n* ≤ 105), showing how many numbers are in the array. The next line contains *n*space-separated integers *xi* (1 ≤ *xi* ≤ 105).

**Output**

Print *n* lines: the *i*-th line should contain "YES" (without the quotes), if number *xi* is Т-prime, and "NO" (without the quotes), if it isn't.