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 T indicate the number of test cases (1 ≤ T ≤ 5). Then for each test case, the first line contains a 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**

For each case, first print a single line contains the case number: Case #k: .Then 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. (See the sample for more information)

Sample input:

2

3

4 5 6

3

9 49 36

Sample Output:

Case #1:

YES

NO

NO

Case #2:

YES

YES

NO