Code : BREAK Problem 4 Score : 100

Break It Up

Problem :

Neha wants to be a magical girl. As training, she wants to make a ball that contains an integer “target”. Initially she has a ball that contains an integer N. She can smash a ball that contains a composite number and break it into two balls.

Each new ball will also contain an integer. If she smashes a ball that contains a composite number x and it breaks into two balls that contain y and z, it satisfies

yz= x and the be either equal tooken numbers must able to make the “target” number. For example, if she smashes a ball that contains 12, it breaks into 2 and 6 or 3 and 4.

Neha can control the ball she smashes, but she can't control the numbers in the two new balls when there are multiple pairs of (y, z) that satisfy the above conditions. She can apply the described ball smash operation arbitrary number of times, but she can't smash a ball that contains a non composite number. If she can always make a ball that contains target, return "Yes" (quotes for clarity). Otherwise, return "No" (quotes for clarity).

Input :

The first line of the input contains an integer T denoting the number of test cases. The description of T test cases follows. The input will include the two integers, first

The number “N” and the other “target”.

Output :

The output must be “True” if the conditions can be met. (See Sample)

Return “No” if it’s not possible.

Sample :

Input :

2 //Number Of Test Cases

517

47

12

6

Output :

Yes

No

Explanation :

If she smashes 517, it breaks into 11 and 47.

If she smashes 12, and it breaks into 3 and 4, 6 cannot be formed.

Scoring :

There will be 2 test cases, each valued 50 points.