Problem F6101
Square Number

A square number or perfect square is an integer that is the square of an integer. For example 9 is a square number as $9 = 3^2$. But 15 is not a square number as we can not write it as a square of some integer.

Given an integer, you are interested in if it is a square number. But today you are very strict about yourself. Since you do not know how Python computes power of a rational number(for example 9 to the power of 0.5), you decide to use some other methods for checking square number. One approach would be checking all possible candidates integers if their square is the given input.

Input

The input consist of 3 lines. Each line consist of a single integer between 1 and 100.

Output

The first line of the output should be either "True"(without quote) or "False"(without quote). If integer on the first line of the input is a square number output "True"(without quote), otherwise output "False"(without quote). The second line and the third line follow the same way.

Sample Input

```
9
15
1
```

Sample Output

```
True
False
True
```