

Problem Statement

You are given an integer, N . Write a program to determine if N is an element of the *Fibonacci sequence*.

The first few elements of the Fibonacci sequence are $0, 1, 1, 2, 3, 5, 8, 13, \cdots$. A Fibonacci sequence is one where every element is a sum of the previous two elements in the sequence. The first two elements are 0 and 1.

Formally:

$$\begin{aligned} \text{fib}_{\{0\}} &= 0 \quad \text{fib}_{\{1\}} = 1 \quad \vdots \quad \text{fib}_{\{n\}} = \text{fib}_{\{n-1\}} + \text{fib}_{\{n-2\}} \quad \text{forall } n > 1 \\ \end{aligned}$$

Input Format

The first line contains T , number of test cases.
 T lines follow. Each line contains an integer N .

Output Format

Display **IsFibo** if N is a Fibonacci number and **IsNotFibo** if it is not. The output for each test case should be displayed in a new line.

Constraints

$$\begin{aligned} 1 \leq T &\leq 10^5 \\ 1 \leq N &\leq 10^{10} \end{aligned}$$

Sample Input

```
3
5
7
8
```

Sample Output

```
IsFibo
IsNotFibo
IsFibo
```

Explanation

5 is a Fibonacci number given by $\text{fib}_5 = 3 + 2$
7 is not a Fibonacci number
8 is a Fibonacci number given by $\text{fib}_6 = 5 + 3$

Time Limit

Time limit for this challenge is given [here](#).