**Is Fibo**

https://d3keuzeb2crhkn.cloudfront.net/s3_pub/hr-avatars/38d0c24c-526e-4ea8-84b2-beb09b6df74e/150x150.png**by**[**shashank21j**](https://www.hackerrank.com/shashank21j)

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

The first few elements of the Fibonacci sequence are . A Fibonacci sequence is one where every element is a sum of the previous two elements in the sequence. The first two elements are  and .

Formally:

**Input Format**   
The first line contains , number of test cases.   
 lines follow. Each line contains an integer .

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

**Constraints**   
 

**Sample Input**

3

5

7

8

**Sample Output**

IsFibo

IsNotFibo

IsFibo

**Explanation**   
 is a Fibonacci number given by    
 is not a Fibonacci number   
 is a Fibonacci number given by

**Time Limit**   
Time limit for this challenge is given [here](https://www.hackerrank.com/environment).

<https://www.hackerrank.com/challenges/is-fibo?utm_source=infinitum16-firsttimer-reminder-24hrs&utm_medium=email&utm_campaign=infinitum16-firsttimer>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication2

{

class Program

{

static void Main(string[] args)

{

int t = int.Parse(Console.ReadLine());

while (t-- > 0)

{

long n = long.Parse(Console.ReadLine());

if (n == 0 || n == 1)

{

Console.WriteLine("IsFibo");

continue;

}

List<long> fib = new List<long>();

fib.Add(0);

fib.Add(1);

for (int i = 2; ; i++)

{

fib.Add(fib[i - 1] + fib[i - 2]);

if (fib[i] > n)

{

Console.WriteLine("IsNotFibo");

break;

}

else if (fib[i] == n)

{

Console.WriteLine("IsFibo");

break;

}

}

}

}

}

}