# Is Fibo



#### **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 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:

$$egin{aligned} fib_0 &= 0 \ fib_1 &= 1 \ &dots \ fib_n &= fib_{n-1} + fib_{n-2} orall n > 1 \end{aligned}$$

## **Input Format**

The first line contains T, number of test cases.

T lines follows. Each line contains an integer N.

## **Output Format**

Display  ${\sf IsFibo}$  if N is a fibonacci number and  ${\sf IsNotFibo}$  if it is not a fibonacci number. The output for each test case should be displayed in a new line.

#### **Constraints**

$$\begin{array}{l} 1 \leq T \leq 10^5 \\ 1 \leq N \leq 10^{10} \end{array}$$

#### **Sample Input**

3 5 7 8

## **Sample Output**

IsFibo IsNotFibo IsFibo

### **Explanation**

5 is a Fibonacci number given by  $\mathrm{fib}_5=3+2$ 

7 is not a Fibonacci number

8 is a Fibonacci number given by  ${
m fib}_6=5+3$ 

#### **TimeLimit**

Time limit for this challenge is given here