import java.util.Scanner;

public class FibonacciCalculator {

 // Recursive method to find the nth Fibonacci number

 public static int fibonacciRecursive(int n) {

 if (n <= 1) {

 return n;

 } else {

 return fibonacciRecursive(n - 1) + fibonacciRecursive(n - 2);

 }

 }

 // Non-recursive (iterative) method to find the nth Fibonacci number

 public static int fibonacciIterative(int n) {

 if (n <= 1) {

 return n;

 }

 int a = 0, b = 1, fib = 1;

 for (int i = 2; i <= n; i++) {

 fib = a + b;

 a = b;

 b = fib;

 }

 return fib;

 }

 public static void main(String[] args) {

 Scanner scanner = new Scanner(System.in);

 System.out.print("Enter the position of the Fibonacci sequence (n): ");

 int n = scanner.nextInt();

 System.out.println("Fibonacci (Recursive) at position " + n + " is: " + fibonacciRecursive(n));

 System.out.println("Fibonacci (Iterative) at position " + n + " is: " + fibonacciIterative(n));

 scanner.close();

 }

}