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/*
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*/
import java.util.Scanner;
public class Fibonacci {

    public void fibonacciIterative(int n)
    {
        int fib1 = 0;
        int fib2 = 1;
        int fib3;
        if(n == 1) {
            System.out.print(fib1);
        }
        if(n == 2) {
            System.out.print(fib1+" "+fib2);
        }
        System.out.print(fib1+" "+fib2);
        for(int i=3; i<=n; i++)
        {

            fib3=fib1+fib2;
            System.out.print(" "+fib3);
            fib1=fib2;
            fib2=fib3;
        }

    }

    public int fibonacciRecursive(int n) {
        if(n == 1 || n == 2) {
            return n-1;
        }
        return fibonacciRecursive(n-1) + fibonacciRecursive(n-2);
    }

    public static void main(String args[]) {
        Fibonacci fib = new Fibonacci();
        Scanner s = new Scanner(System.in);

        System.out.println("Iterative version:");
        System.out.print("Enter no of terms to be generated in
fibonacci sequence:");
        int n=Integer.parseInt(s.nextLine());
        fib.fibonacciIterative(n);

        System.out.println("\nRecursive version:");
        System.out.print("Enter no of terms to be generated in
fibonacci sequence:");
        n=Integer.parseInt(s.nextLine());
        System.out.print(fib.fibonacciRecursive(n));

    }
}

```