```java
import java.util.ArrayList;
import java.util.Random;
import java.util.Scanner;

public class BulgarianSolitaire {
    public static void main(String[] args) {
        Random r=new Random();
        Scanner src = new Scanner(System.in);
        System.out.print("Input the number of rows: ");
        int n=src.nextInt();
        int trig = Math.abs(n*(n+1)/2);
        int a;
        ArrayList<Integer> num=new ArrayList<Integer>();
        for(int i=trig; i>0; i=i) {
            a=r.nextInt(i)+1;
            num.add(a);
            i-=a;
        }
        System.out.println(trig);
        System.out.println(num);
        int count=0;
        while(!check(num)) {
            for(int i=0; i<num.size(); i++) {
                num.set(i, num.get(i)-1);
                count++;
                if(num.get(i)==0) {
                    num.remove(i);
                    i--;
                }
            }
            num.add(count);
            count =0;
            System.out.println(num);
        }
    }
    public static boolean check(ArrayList<Integer> num) {
        boolean order = true;
        for(int i=0; i<num.size()-1; i++) {
            if(num.get(i)!=(num.get(i+1)-1))
            order= false;
        }
        return order;
    }
}
```