

```

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

public class BulgarianSolitaire {
    public static void main(String args[]) {
        Scanner s = new Scanner(System.in);
        Random r = new Random();
        System.out.println("What is the number of stacks do you want? ");
        int stacks = s.nextInt();
        s.close();
        int cards = stacks * (stacks + 1) / 2;
        ArrayList<Integer> shuffles = new ArrayList<Integer>();
        ArrayList<Integer> finalConfig = new ArrayList<Integer>();

        int i = stacks;
        while (i > 0) {
            finalConfig.add(i);
            i--;
        }

        int n = cards;
        int nStack = 0;
        while (n > 0) {
            nStack = r.nextInt(n) + 1;
            shuffles.add(nStack);
            n = n - nStack;
        }

        System.out.println("Original List");
        for (int j = 0; j < shuffles.size(); j++) {
            System.out.print(shuffles.get(j) + " ");
        }
        System.out.println("");

        int origLen = 0;
        while(!(shuffles.containsAll(finalConfig) && (finalConfig.size() == shuffles.size()))) {
            origLen = shuffles.size();
            for(int j = 0; j < shuffles.size(); j++) {
                shuffles.set(j, shuffles.get(j) - 1);
            }
            shuffles.removeIf(card -> (card == 0));
            shuffles.add(origLen);
            shuffles.sort(null);
            for (int j = 0; j < shuffles.size(); j++) {
                System.out.print(shuffles.get(j) + " ");
            }
            System.out.println("");
        }
    }
}

```