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

public class BulgarianSolitaire {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        Scanner scanny = new Scanner(System.in);
        System.out.println("How many cards do you want? ");
        int numCards = scanny.nextInt();
        scanny.close();


        int n = (int) Math.sqrt(2*numCards);
        if (n*(n+1)/2 != numCards)  {
            System.out.println(numCards + " is not triangular");
        }

        ArrayList<Integer> finalConfig = new ArrayList<Integer>();
            for (int i = 1; i <= n; i++) {
                finalConfig.add(i);
        }

        Random randy = new Random();
        ArrayList<Integer> startConfig = new ArrayList<Integer>();

        while (numCards > 0) {
            int c = randy.nextInt(numCards) + 1;
            startConfig.add(c);
            numCards -= c;
        }

        System.out.println("Starting pile configuration: " +
startConfig);

        boolean check = true;
        int count = 0;

        while (check) {

            for (int i = startConfig.size()-1; i >=0; i--)
            {
                startConfig.set(i,startConfig.get(i)-1);
                count ++;

                if (startConfig.get(i)==0) {
```

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48                      startConfig.remove(i);
49                  }
50              }
51
52              startConfig.add(count);
53              count = 0;
54              System.out.println("Current configuration: " + startConfig);
55
56
57              if (startConfig.containsAll(finalConfig) && startConfig.size
  ()==finalConfig.size())
58              {
59                  check= false;
60              }
61          }
62          System.out.println("Final pile configuration: " + finalConfig);
63
64      }
65}
66
67
68
69
```