

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

```
public class BulgarianSolitaire {
```

```
    public static void main(String[] args) {
```

```
        Scanner input = new Scanner(System.in);
```

```
        System.out.print("Please enter a triangular number: ");
```

```
        int n = input.nextInt();
```

```
        int c = n;
```

```
        int counter = 0;
```

```
        Random rand = new Random();
```

```
        ArrayList <Integer> cards = new ArrayList <Integer>();
```

```
        while (n!= 0)
```

```
        {
```

```
            for (int i = 0; i<n; i++)
```

```
            {
```

```
                int x = rand.nextInt(n)+1;
```

```
                if (n-x>=0)
```

```
                {
```

```
                    cards.add(x);
```

```
                    n -= x;
```

```
                }
```

```
            }
```

```
        }
```

```
ArrayList <Integer> perf = new ArrayList <Integer>();  
  
int sum = 0;  
int j = 1;  
while (sum < c)  
{  
  
    if (j+sum<=c)  
    {  
        perf.add(j);  
        sum = sum+j;  
        j++;  
    }  
  
}  
  
while (cards.containsAll(perf) == false && cards.contains(0) == false)  
{  
  
    for (int i = 0; i<cards.size(); i++)  
    {  
        cards.set(i, cards.get(i)-1);  
        counter++;  
  
        if (cards.get(i)==0)  
        {  
            cards.remove(i);  
        }  
    }  
}
```

```
}
```

```
cards.add(counter);
```

```
counter = 0;
```

```
System.out.println(cards);
```

```
}
```

```
}
```

```
}
```