

```
1  /* Problem 3--The Cornucopia
2     This was the ASCII art problem this year.  This was pretty
3     straightforward. */
4
5  import java.io.*;
6  import java.util.*;
7
8  public class prob3 {
9
10     private static Scanner in = null;
11     private static PrintWriter out = null;
12     private static int cs = 0;
13
14     public static void main (String[] args) throws Exception {
15
16         in = new Scanner (new File ("prob3.in"));
17         out = new PrintWriter ("prob3.out");
18         while (true) {
19             int sz = in.nextInt ();
20             if (sz==0) break;
21             Process (sz); //process each data case
22         }
23         in.close ();
24         out.close ();
25     }
26
27     /*Process draws the hexagon */
28     public static void Process (int sz) throws Exception {
29
30         sz = 2*sz-1;
31         for (int i=0; i < sz; i++) out.print (" "); //top of hexagon
32         for (int i=0; i < sz; i++) out.print ("-");
33         out.print ("\r\n");
34         for (int i=sz-1; i >= 0; i--) {
35             for (int j=0; j < i; j++) out.print (" ");
36             out.print ("/"); //top half
37             for (int j = 0; j < 3*sz-2*i-2; j++)
38                 out.print (" ");
39             out.print ("\\\r\n");
40         }
41         for (int i=0; i < (3*sz-1)/2; i++) out.print (" ");
42         out.print ("C\r\n"); //the cornucopia
43         for (int i=0; i <= sz-1; i++) {
44             for (int j=0; j < i; j++) out.print (" ");
45             out.print ("\\");
46             for (int j = 0; j < 3*sz-2*i-2; j++)
47                 out.print (" ");
48             out.print ("/\r\n");
49         }
50         for (int i=0; i < sz; i++) out.print (" ");
51         for (int i=0; i < sz; i++) out.print ("-");
52         out.print ("\r\n\r\n");
53     }
54 }
55
```