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1  package com.company;
2  import java.sql.SQLOutput;
3  import java. util. *;
4  public class Main {
5      public static void main(String args[]) {
6          System.out.println("Enter the Number upto which spiral is to be
printed");
7          Scanner sc = new Scanner(System.in);
8          int n = sc.nextInt();
9          int k = n;
10         int i = 1;
11         int j = 1;
12         for (i = 4, j = 1; ; j++) {
13             if (n <= i) {
14                 n = j;
15                 break;
16             } else
17                 i = ((j + 1) * (j + 1)) * 4;
18         }
19         int x;
20         int a = n - 1;
21         i = n - 1;
22         j = n - 1;
23         int y = 1;
24         String arr[][] = new String[2 * n][2 * n];
25         for (x = 1; x <= 2 * n; x++) {
26             a += Math.pow((-1), (x + 1)) * x;
27             if (x <= ((2 * n) - 1)) {
28                 while (i != a || j != a) {
29                     if (y <= k) {
30                         if (y < 10)
31                             arr[i][j] = "0" + Integer.toString(y);
32                         else
33                             arr[i][j] = Integer.toString(y);
34                     } else
35                         arr[i][j] = "";
36                     if (j == a)
37                         i = (int) Math.pow((-1), (x + 1)) + i;
38                     else
39                         j = (int) Math.pow((-1), (x + 1)) + j;
40                     y++;
41                 }
42             } else {
43                 while (j >= 0) {
44                     if (y <= k)
45                         arr[i][j] = Integer.toString(y);
46                     else

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47         arr[i][j] = "";
48         y++;
49         j--;
50     }
51 }
52 }
53 for (i = 0; i < 2 * n; i++) {
54     for (j = 0; j < 2 * n; j++) {
55         System.out.print(arr[i][j] + " ");
56     }
57     System.out.println();
58     System.out.println();
59 }
60 }
61 }
62
```