**Code:**

import java.util.\*;

 /\* Class TowerOfHanoiUsingStacks \*/

 public class p5

 {

     public static int N;

     /\* Creating Stack array  \*/

     public static Stack<Integer>[] tower = new Stack[4];

     public static void main(String[] args)

     {

         Scanner scan = new Scanner(System.in);

         tower[1] = new Stack<Integer>();

         tower[2] = new Stack<Integer>();

         tower[3] = new Stack<Integer>();

         /\* Accepting number of disks \*/

         System.out.println("Enter number of disks");

         int num = scan.nextInt();

         N = num;

         toh(num);

     }

 /\* Function to push disks into stack \*/

     public static void toh(int n)

     {

         for (int d = n; d > 0; d--)

             tower[1].push(d);

         display();

         move(n, 1, 2, 3);

     }

     /\* Recursive Function to move disks \*/

     public static void move(int n, int a, int b, int c)

     {

         if (n > 0)

         {

             move(n-1, a, c, b);

             int d = tower[a].pop();

             tower[c].push(d);

             display();

             move(n-1, b, a, c);

         }

     }

     /\*  Function to display \*/

     public static void display()

     {

         System.out.println("  A  |  B  |  C");

         System.out.println("---------------");

         for(int i = N - 1; i >= 0; i--)

         {

             String d1 = " ", d2 = " ", d3 = " ";

             try

             {

                 d1 = String.valueOf(tower[1].get(i));

             }

             catch (Exception e){

             }

             try

             {

                 d2 = String.valueOf(tower[2].get(i));

             }

             catch(Exception e){

             }

             try

             {

                 d3 = String.valueOf(tower[3].get(i));

             }

             catch (Exception e){

             }

             System.out.println("  "+d1+"  |  "+d2+"  |  "+d3);

         }

         System.out.println("\n");

     }

 }