**B) Write a program to solve Tower of Hanoi puzzle.**

//Poonam Kisan Salbande

// Roll no :20121011

import java.util.Scanner;

public class Hanoi{

    public static void towerOfHanoi(int n, char source, char auxiliary,char target)

    {

         // Base case: If there is only one disk to move, move it from the source to the target.

        if(n==1)

        {

            System.out.println("Move disk 1 from "+ source + "to " + target);

            return;

        }

        // Move n-1 disks from the source to the auxiliary peg using the target peg as an auxiliary.

        towerOfHanoi(n-1, source,  target, auxiliary);

        // move the n th disk from source to the target peg

        System.out.println("Move disk  "+ n + " from " + source + " to" + target);

          // Move the n-1 disks from the auxiliary peg to the target peg using the source peg as an auxiliar

         towerOfHanoi(n-1, source,  target, auxiliary);

    }

    public static void main(String[] args)

    {

        // int n =4;

        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the number of disks: ");

        int n = scanner.nextInt();

        scanner.close();

        towerOfHanoi(n, 'A', 'B', 'C');

    }

}

**Output:**

**cd "d:\7 th semister\DAA\" ; if ($?) { javac Hanoi.java } ; if ($?) { java Hanoi }**

**Enter the number of disks: 3**

**Move disk 1 from Ato C**

**Move disk 2 from A toB**

**Move disk 1 from Ato C**

**Move disk 3 from A toC**

**Move disk 1 from Ato C**

**Move disk 2 from A toB**

**Move disk 1 from Ato C**

**PS D:\7 th semister\DAA>**