

Task 1: Tower of Hanoi Solver

Create a program that solves the Tower of Hanoi puzzle for n disks. The solution should use recursion to move disks between three pegs (source, auxiliary, and destination) according to the game's rules. The program should print out each move required to solve the puzzle.

```
public class TowerOfHanoi {

    public static void solveTowerOfHanoi(int n,char sourceRod,
        char targetRod,char auxiliaryRod) {
        if(n==1) {
            System.out.println("Move disk 1 from rod "+sourceRod+" to "+
            targetRod);
            return ;
        }
        solveTowerOfHanoi(n-1,sourceRod,auxiliaryRod,targetRod);
        System.out.println("Move disk "+n+" from rod "+sourceRod+
            " to Rod "+targetRod);
        solveTowerOfHanoi(n-1,auxiliaryRod,targetRod,sourceRod);
    }

    public static void main(String[] args) {

        int numberOfDisks=3;

        solveTowerOfHanoi(numberOfDisks,'A','C','B');
    }
}
```