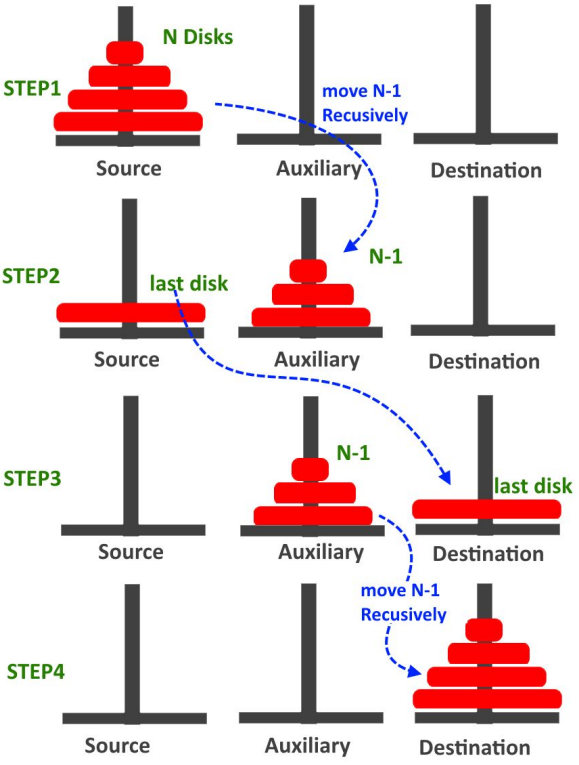
Tower of Hanoi

Find the recursive pattern...



1 disk

Move disk 1 from A to B

2 disks

Move disk 1 from A to B } Pattern from 1 disk
Move disk 2 from A to C
Move disk 1 from B to C } Pattern from 1 disk

3 disks

Move disk 1 from A to B
Move disk 2 from A to C
Move disk 1 from B to C
} Pattern from 2 disks

Move disk 3 from A to B

Move disk 1 from C to A
Move disk 2 from C to B
Move disk 1 from A to B
} Pattern from 2 disks

4 disks

Move disk 1 from A to B
Move disk 2 from A to C
Move disk 1 from B to C
Move disk 3 from A to B
Move disk 1 from C to A
Move disk 2 from C to B
Move disk 1 from A to B
} Pattern from 3 disks

Move disk 4 from A to C

Move disk 1 from B to C
Move disk 2 from B to A
Move disk 1 from C to A
Move disk 3 from B to C
Move disk 1 from A to B
Move disk 2 from A to C
Move disk 1 from B to C
} Pattern from 3 disks

An alternative way to look at the actions of 3 disks

```
moveDisk(3, A, B, C)
    moveDisk(2, A, C, B)
        moveDisk(1, A, B, C)
            [Move disk 1 from A to B]
        end
        [Move disk 2 from A to C]
        moveDisk(1, B, C, A)
            [Move disk 1 from B to C]
        end
    end
    [Move disk 3 from A to B]
    moveDisk(2, C, B, A)
        moveDisk(1, C, A, B)
            [Move disk 1 from C to A]
        end
        [Move disk 2 from C to B]
        moveDisk(1, A, B, C)
            [Move disk 1 from A to B]
        end
    end
end
```