


```
static int hanoi (int n) {
```

```
    if (n == 1) {
```

```
        return 1;
```

→ base case

```
    } else if (n == 2) {
```

```
        return 2;
```

```
    } else if (n == 3) {
```

```
        return 7;
```

```
    } else {
```

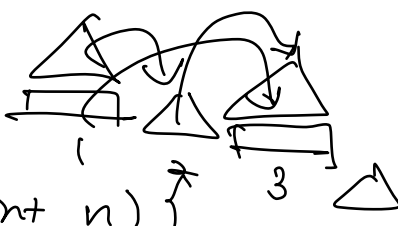
→ recursive case

```
        return 2 * hanoi(n-1) + 1;
```

```
    }
```

```

static void printHanoi (int n) {
    if (n==1) {
        syso(1 3)
    } else if (n==2) {
        syso(1 2)
        syso(1 3)
        syso(2 3)
    } else if (n==3) {
        syso(1 3)
        syso(1 2)
        syso(3 2)
        syso(1 3)
        syso(2 1)
        syso(2 3)
        syso(1 3)
    }
}
        
```



1 → 2
1 → 3
2 → 3

1 → 2
3 → 1

3 → 2
1 → 2

2 & 3 = 5 → 1
1 & 2 = 3 1 & 3 = 4 → 2

① ② ③

1 → 2

2 → 3

move(int x, int y)

syso(1, 3)