

## Comp 182 Fall 2021: Project 2 - Towers of Hanoi

Program a solver for the Towers of Hanoi problem presented below. Submit the following to canvas: Hanoi.java, Driver.java (contains your main method). This is an individual project. Students may discuss solutions to the problem but may not share code with one another. I will discuss this project during our next lecture.

Rules:

- a) There are three Pillars (Pillar1, Pillar2, Pillar3).
- b) There are N number of disks of increasing size (disk size is indicated by an integer).
- c) At the start, all disks are stacked on one of the pillars.
- d) At no point can a disk of larger size be placed above a disk of smaller size (including the start state).
- e) You have to move all disks from the start pillar to a target pillar.
- f) Only one disk can be moved at a time.

### Sample Run:

```
Hanoi mySolver = new Hanoi(3,1,3);
//the first parameter is the number of disks
//the second parameter is the start pillar
//the third parameter is the target
```

### The output should be:

My Solution is:

```
t0      Pillar1: 3 2 1
t0      Pillar2:
t0      Pillar3:

t1      Pillar1: 3 2
t1      Pillar2:
t1      Pillar3: 1

t2      Pillar1: 3
t2      Pillar2: 2
t2      Pillar3: 1

t3      Pillar1: 3
t3      Pillar2: 2 1
t3      Pillar3:

t4      Pillar1:
t4      Pillar2: 2 1
t4      Pillar3: 3

t5      Pillar1: 1
t5      Pillar2: 2
t5      Pillar3: 3

t6      Pillar1: 1
t6      Pillar2:
t6      Pillar3: 3 2

t7      Pillar1:
t7      Pillar2:
t7      Pillar3: 3 2 1
```