**Towers of Hanoi Project Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**You are going to create a project called Towers of Hanoi. The goal of the program is to print out the directions for completing the Towers of Hanoi game for a given number of discs which will be identified by the user. The output should number the steps as they are displayed.**

**The entire program should be done in one file, and should print out a list of steps used to complete the game. You will need to use a recursive method to complete the game.**

**HINT: Use the** [**link**](https://www.mathsisfun.com/games/towerofhanoi.html) **to play the game and figure out the pattern used.**

**Example Run:**

*Enter the number of discs on your tower:*

*3*

*Step 1: Move the top disc from tower 1 to tower 3.*

*Step 2: Move the top disc from tower 1 to tower 2.*

*Step 3: Move the top disc from tower 3 to tower 2.*

*Step 4: Move the top disc from tower 1 to tower 3.*

*Step 5: Move the top disc from tower 2 to tower 1.*

*Step 6: Move the top disc from tower 2 to tower 3.*

*Step 7: Move the top disc from tower 1 to tower 3.*

*BUILD SUCCESSFUL (total time: 3 seconds)*

*Enter the number of discs on your tower:*

*4*

*Step 1: Move the top disc from tower 1 to tower 2.*

*Step 2: Move the top disc from tower 1 to tower 3.*

*Step 3: Move the top disc from tower 2 to tower 3.*

*Step 4: Move the top disc from tower 1 to tower 2.*

*Step 5: Move the top disc from tower 3 to tower 1.*

*Step 6: Move the top disc from tower 3 to tower 2.*

*Step 7: Move the top disc from tower 1 to tower 2.*

*Step 8: Move the top disc from tower 1 to tower 3.*

*Step 9: Move the top disc from tower 2 to tower 3.*

*Step 10: Move the top disc from tower 2 to tower 1.*

*Step 11: Move the top disc from tower 3 to tower 1.*

*Step 12: Move the top disc from tower 2 to tower 3.*

*Step 13: Move the top disc from tower 1 to tower 2.*

*Step 14: Move the top disc from tower 1 to tower 3.*

*Step 15: Move the top disc from tower 2 to tower 3.*

*BUILD SUCCESSFUL (total time: 3 seconds)*