CSc 227 — Program Design and Development
Spring 2014 (McCann)

http://www.cs.arizona.edu/classes/cs227/spring14/

Section Activity #9: Two Recursive Methods

Your Names: _____

Directions: In groups of two (or three, if need be), complete the following activity. This section activity will be graded; all students in the group will receive the same score. Make sure that the names of all group members are on the page you submit to your section leader. Section Meeting 14 (2014/04/23-24)

Task: Write **recursive** implementations of the following two methods.

1. Write a recursive method named `threeToTheN` that accepts a non-negative integer value n and returns a string of pound signs ('#') of length equal to 3^n. For example, if $n = 2$, a string of $3^2 = 9$ pound signs will be returned. Note that $n = 0$ is legal, because $3^0 = 1$. If n is less than 0, throw an IllegalArgumentException.

```
public String threeToTheN (int n) {




}
```

(The second method is on the back side . . .)

2. In math, a *series* is the sum of a sequences of values. For example, the series $4+5+6+7$ represents the sum of the sequence of integers starting at 4 and ending with 7; that is, the sequence $4, 5, 6, 7$.

   Write a recursive method named `displaySeries()` that accepts two integers a and b and prints to the screen a representation of the series of the integers starting at a and ending with b. Using the above example, `series(4,7)` should display `4 + 5 + 6 + 7` (including the separating spaces). If $b < a$, throw an IllegalArgumentException.

```
public void displaySeries (int a, int b) {









}
```