Lesson 03 – Methods & Loops Assignments

All coding assignments will be name Lab (Lesson Number) \_ (Problem Number).java unless otherwise stated. EX: Lab01\_01.java

Add a comment in the first couple line of your code with your name and the date.

All written assignments will be name Lab (Lesson Number) \_ Questions.txt or Lab (Lesson Number) \_ Questions.docx. The question will go inside.

In the header of the doc or first few line (txt), put your name and the date.

**Comment all code in meaningful ways that would help other, not knowing about coding, understand what is going on.**

Coding Problems

1. Recreate the advance BMI but after calculating the BMI, pass the number into another method that will print out the weight class of the user.
2. Recreate the advance calculator that will call a method to do the math
3. Create a program, using a for loop, to make a factorial calculator.
4. Recreate #3 but use recursion instead of a for loop.
5. Create a program that asks the user for a coefficient and a size to print out a multiplication table for that coefficient for the size specified by the user.
6. Create a multiplication table (12x12) using two for loops.

Challenge

1. Create a program called Stars that asks the user for a positive integer less than 23 and prints out a pyramid in response
   1. Example (Underlines are user Input):
   2. Height: 25
   3. Wrong Input, Try Again: 5
   4. \*
   5. \*\*
   6. \*\*\*
   7. \*\*\*\*
   8. \*\*\*\*\*
2. Create a program called Fib that asks the user for a positive non-zero integer n and prints out the nth Fibonacci number. Fibonacci numbers are defined as f(n) = f(n-1) + f(n-2). Your base case is that f (1) = 1 and f (2) = 1.
   1. Example:
   2. Nth Fibonacci number: 5
   3. 5
   4. Example2:
   5. Nth Fibonacci number: 7
   6. 13