

## CSC 241

### Lab 4

Given the following files (see Extra Files):

**IncreaseFactorial.java**

**FactorialCounter.java**

**TestFactorial.java**

Complete the parallelized version of the factorial method (n!).

The **multipleIncrement** method of the **FactorialCounter** class needs to be completed such that it uses the **increment** method.

The **result** needs to be computed before it is returned from the **factorialParallel** method of **TestFactorial** class.

Answer the following questions:

- 1) Remove the comments within the **run** method of the **IncreaseFactorial** class and observe the different threads executing with their various **hold** values.  
Do all four threads get to work all of the time?
- 2) Update the code to use only two threads. Does it run faster? Why, or why not?
- 3) Why does the parallelized method run slower than the serial version?