***CODE JAM***

**Java Threading Fiesta**

**Challenge Overview**

Running concurrent processes in Java can be confusing. Ensuring reliable, fast code while using Java threads is often allusive. This challenge will test your knowledge of concurrency options within the Java programming language.

**Problem Resources**

You are given a zip file with the following contents:

* Input Files – trade\_data\_1.txt, trade\_data\_2.txt, trade\_data\_3.txt
* Entry Java Class – Start.java
* This Document

**Problem Description**

Create a program that takes the input file trade\_data.txt and creates the following (in the provided output directory):

1) an output file containing all buy transactions (buy.txt)

2) an output file containing all sell transactions (sell.txt)

* The format of the output files should be identical to the input files
* You must use a minimum of two threads in your solution
* You can use any threading framework available including Java version 7
  + Thread..Runnable
  + Executor..Callable (Java 5)
  + Fork..Join (Java 7)



**Submitting Solution**

All solutions must be submitted by 11:59 p.m. Wednesday, August 24th. Zip up your src and compiled classes folders into a single file – solution\_*firstname\_lastname*.zip, replacing first and last name with your actual first and last name. The structure is shown below:

solution\_*firstname*\_*lastname*.zip  
 |  
 |  
 ---->src (source files here)  
 |  
 |  
 ---->classes (compiled files here)

No need to include input or output files. Send zipped file to [Terry.McKee@cmegroup.com](mailto:Terry.McKee@cmegroup.com). Results and the winner will be announced at the next Code Jam.

**Threading Resources**

The Java Tutorials: [Concurrency](http://download.oracle.com/javase/tutorial/essential/concurrency/index.html) (<http://download.oracle.com/javase/tutorial/essential/concurrency/index.html>)

The Concurrency Utilities: [Concurrency Tools](http://www.particle.kth.se/~lindsey/JavaCourse/Book/Part1/Java/Chapter10/concurrencyTools.html) (<http://www.particle.kth.se/~lindsey/JavaCourse/Book/Part1/Java/Chapter10/concurrencyTools.html>)

**Good Luck.**