

In-Class Activity #1

Name #1: _____ Section Leader: _____

Name #2: _____ Section Leader: _____

Name #3: _____ Section Leader: _____

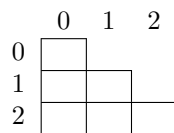
Directions: In groups of two or three, answer the following questions to the best of your collective ability. When appropriate, we encourage you to show your work, to help us understand your thought process. ICAs (In-Class Activities) count toward your grade; please take them seriously. Week 2 (2015/09/02)

1. Exceptions!

- (a) “Checked” exceptions have that name because programmers need to do one of two things with them. What are those two options?

- (b) In section this week, we asked you to debug code that generated a `StringIndexOutOfBoundsException` exception. Which kind of exception is this, checked or unchecked? (Hint: The exception is not listed on Monday’s handout, but you should still be able to figure out which kind of exception it is based on what you did in section to eliminate it.)

2. On Monday you learned (or were reminded) how to ‘manually’ allocate a 2-D array in Java. We can use this technique to create 2-D arrays with rows of differing lengths, such as a *lower-left triangular matrix*. Here’s an example with three rows:



Write the Java code necessary to declare and allocate memory for a lower-left triangular matrix with n rows. Assume that n is already declared to be an `int` and has been initialized to a positive integer value.

When your group is satisfied with your answers, hand this to one of the class staff. We’ll review the correct answers after time is up.