

Assignment #4

Original Due: 3:00 PM, Monday, April 12

Extended: 3:00 PM, Monday, April 19

You must complete this assignment by yourself. You cannot work with anyone else in the class or with someone outside of the class. You are not allowed to copy solutions from the world wide web. The code you write must be your own.

Provided Files:

- A4.java – A shell file.
- input.txt – A sample input file. Each line is a valid infix arithmetic expression.
- output.txt – A sample output file. For each arithmetic expression there is one line of output.

Description: Complete member methods of class A4, a Java program that solves arithmetic expressions in infix form. The shell file contains a few placeholders (see below) that indicate where to fill in your code.

```
//-----  
// Fill in your code here  
  
//  
//-----
```

You are only allowed to add your code to the placeholders. You are NOT allowed to remove or change any existing code in the shell file.

You must use class MyGenericStack (included in A4.java) for this assignment.

You may assume that:

- (1) each operand or operator is separated by a single blank space.
- (2) legal operators are only addition (+), subtraction (-), multiplication (*) and division (/).
- (3) expressions do not include parentheses. So, your program should NOT handle parentheses.

Given a particular input, your program should produce the same output. Even minor differences in output will cause you to lose points.

Submission: your **A4.java** file.

General Programming Assignment Requirements:

- Classes must be in the default (no package statement) unless otherwise specified. You will lose 20 points (all points) if you put a package statement in your program.
- If your program that does not compile or does not run, you will lose all points.
- If you submit the wrong file your grade will suffer accordingly. Most likely a 0.
- You must fill in the header for every file you submit or you may lose points.

Checklist: Did you remember to:

- worked on the programming assignment by yourself?
- fill in the header in your file **A4.java**?
- ensure your program does not suffer a compile error or runtime error?
- ensure your program creates the correct output and that it matches the expected output exactly?
- properly indent your source code so that your indenting is readable and consistent?
- use good names for variables to make your program easy to understand?