UNIVERSITY AT ALBANY
State University of New York

COLLEGE OF ENGINEERING AND APPLIED SCIENCES
DEPARTMENT OF COMPUTER SCIENCE

ICSI201 Introduction to Computer Science

Lab 05 Created by Qi Wang

Goals:

- The *StringTokenizer* class

Notice that students are expected to start the lab as soon as the description is available, seek feedback during the lab and submit all required documents included on time.

Work will be rejected with no credit if

- The work is late.
- The work is not submitted properly (Blurry, wrong files, not in required format, crashed files, etc.).
- The work is a copy or partial copy of others' work (such as work from another person or the Internet).

Labs are contiguous study of the lecture or used as stepping-stones for the projects. Skipping lab activities would impact the learning significantly.

Submissions (100 points):

- Source code (a Java file)

Instructions:

Study the lecture notes for the *StringTokenizer* class (pages 23-27) prior to the lab. During the lab, your co-instructor will discuss the class briefly. Complete the following tasks:

- Create an input/text file by including the following expressions and six more in the file. Notice that there is a space before and after each operator for all operators included.

```
(12 + 4) * 3
(12 / 23) * 322
(12 + 4) * 3 + 45
(12 / 23) * 322 / 4 – 123
```

- Write a program that reads next arithmetic expression from the input file, tokenizes it, and displays all the tokens of the expression one token per line. For example, `(12 + 4) * 3` should be tokenized and displayed as follows:

```
(
12
+
4
)
*
3
```

- Include Javadoc style comments for the class and *main*. Include comments for the code blocks in *main*. An algorithm is not required for this lab.