Parser

***This homework is a programming assignment.**

***You need to submit Python files on the GitHub classroom.**

***You need to include your name as a comment in Python files.**

***You also need to submit a screenshot of your GitHub repository on Blackboard.**

***While working on the assignment, read this document THOROUGHLY.**

Homework Description

In this homework, you need to complete parserr.py (and modify other files if necessary) so that our parser builds a tree from the below three cases.

1. Grouped Expression (ex. 1 * (2 + 5))

2. Single Number Expression (ex. 25)

3. Expression with Negative Sign (ex. -25 * 3)

Homework Guideline

To get information about how to implement the above cases in a parser, look at ‘HW6_resources.pptx’ on

Blackboard.

Test Cases

This section provides several test cases to check whether you wrote a parser correctly. In the main.py,

you will change srcCode with the below test cases and see whether your output results are matched

with the ones given in the table.

```
import lexer

import parserr

srcCode = "1 * (2 + 5)"

tokSeq = lexer.tokenize(srcCode)

rootNode = parserr.parse(tokSeq)

parserr.printTree(rootNode)

print()
```

main.py

Test Case (srcCode) Output Result

1 * (2 + 5) (1 * (2 + 5))

(1 + 2) * 5 + 4 (((1 + 2) * 5) + 4)

23 * ((1 + 5) * 33) (23 * ((1 + 5) * 33))

24 24

125 125