Semester: Spring 2021/2022



Course Code: CS-352
Title: Compiler Design
Instructor: Prof. Abdelaziz Khamis

## FLEX Assignment – Due Date: Sunday, May 22, 2022

- **1.** Write a FLEX program that will produce a program to count characters and lines. in a text file and reports counts.
- **2.** Write a FLEX program that will produce a program to convert all uppercase letters in a text file to lower case.
- 3. Write a FLEX program that will produce a program to extract all numbers in a text file and print its reversed. For example: 123 will be 321.
- **4.** Write a FLEX program that will produce a program to accept only strings of digits that represent even numbers. The output should state if the input is accepted, odd number or not a number.
- 5. Write a FLEX program that will produce a program to check for balanced parentheses in an arithmetic expression.

To test your program, store the following arithmetic expressions in a text file:

```
((a+b*(b+c))

(a*(b+c))

((a/c)*b)+(b-(-c)))

(a+b)-(c*(d-e))
```

If the name of your text file is Sample.text, then the corresponding output will be as shown in the following screenshot:

```
Enter the name of file
Sampletext.txt
a+b*b+c
Error at line N0 1: It has extra or missing parentheses.
a*b+c
Expression at line No 2 has balanced parentheses.
a/c*b+b--c
Error at line N0 3: It has extra or missing parentheses.
a+b-c*d-e
Expression at line No 4 has balanced parentheses.

Process exited after 69.21 seconds with return value 0
Press any key to continue . . .
```