

# CSC 2111 lab 25

## Objectives:

- Implement and utilize a stack abstract data type

## Question 1:

Accompanying this question is a skeleton of a program that defines a Stack class, as well as a main function to read an algebraic expression from the user. Complete the main program and determine if the user has provided an expression with a balanced set of parenthesis. Your algorithm must make use of a **stack**.

## Example Outputs:

```
Enter an expression
1 + 3
Balanced Parenthesis
Press any key to continue . . .
```

```
Enter an expression
1 + (3 * 5 - 7
Mismatched Parenthesis
Press any key to continue . . .
```

```
Enter an expression
5 * ( 3 + 7 )
Balanced Parenthesis
Press any key to continue . . .
```

```
Enter an expression
) + 3 * ( 7 + 4
Mismatched Parenthesis
Press any key to continue . . .
```