**CSE 211- Data Structures**

**Assignment III**

**Due:** 20.3.2017

1. Show the contents of the stack in each step when you are checking if the following parentheses are matched correctly.
2. ( ( [ { ( ) } ( ) ] ) )
3. ( [ ( ) () }
4. Convert the following statements from infix to postfix form manually.

a. A \* (B – C) / D + E

b. A – B \* C – (D + F) \* E

1. Show how you can evaluate the following infix statements using stacks. Draw each step. You need to **first convert them into postfix form using stacks** **then evaluate the postfix expression using stacks**. You need to show the contents of the stack for both operations in each step.
2. 10-4\*2/2+5\*9+1
3. 6 \* ((5-2) \* (2+1)) -9/3