

**SSN College of Engineering, Kalavakkam**  
**Department of Computer Science and Engineering**  
**III Semester - CSE 'A ', 'B'**  
**UCS 1312 Data Structures Lab**

**Academic Year: 2019-2020**

**Batch: 2018-2022**

**Exercise 7: Expression Tree**

- Input : infix expression, Output: expression tree
- Use CharStack ADT to convert the infix expression into postfix expression
- Create TreeStack ADT to push and pop tree nodes (element, left ptr, right ptr)
- Use TreeStack ADT to convert the postfix expression into expression tree
- Display the tree using preorder, inorder and postorder traversals.
- Test for the following expressions
  - a.  $(2+5) * (3-6) / (7*8)$
  - b.  $7 - (((3+2) * (6+1)) / (5+6))$
  - c.  $((3+2) * (2+5))$