

**SSN COLLEGE OF ENGINEERING`
DEPARTMENT OF CSE**

DATA STRUCTURES LABORATORY (CS8381)

Ex. No. 7 Implementation of Expression Tree (Binary Tree) and its Traversals

Create the following structure to represent the node of the **expression tree**.

```
typedef struct treenode *ptrtonode
typedef struct ptrtonode tree;
struct treenode
{
    elementtype element;
    tree left;
    tree right;
};
```

Get the postfix expression (in the form of string) as input and construct the expression tree using **Stack ADT**. Perform the preorder, inorder and postorder traversals on the expression tree.

The program should have the following options:

1. Get the postfix expression
2. Construct the expression tree
3. Preorder traversal
4. Inorder traversal
5. Postorder traversal
6. Exit