

COURSE TITLE	:	DATA STRUCTURES LAB
COURSE CODE	:	4138
COURSE CATEGORY	:	A
PERIODS/WEEK	:	6
PERIODS/SEMESTER	:	90
CREDITS	:	3

List of Experiments

1. Implement Stack ADT using array.
2. Implement an algorithm to convert infix to postfix expression using Stack ADT
3. Implement an algorithm to evaluate a postfix expression using stack ADT
4. Implement an algorithm to convert decimal number to its binary equivalent using stack ADT
5. Implement a Queue ADT (circular queue) using array.
6. Implement a List ADT (using array) with operations find(), makeEmpty(), printList(), findKth() etc.
7. Implement a LinkedList ADT with operations find(), makeEmpty(), printList(), findKth(), insert(), delete() etc.
8. Implement a stack using LinkedList ADT
9. Implement a queue using LinkedList ADT
10. Implement a Binary Search Tree ADT with operations inOrder(), preOrder(), postOrder(), insert(), delete(), find() etc.
11. Implement a BST using BST ADT and find height of the tree
12. Implement a BST using BST ADT and determine the number of nodes
13. Implement Graph ADT with operations dfs() and bfs()
14. Implement Warshall's algorithm to find the shortest path using Graph ADT
15. Implement binary search algorithm
16. Implement Quick sort algorithm

Software Requirement : Linux operating System and gcc/g++