

## INDEX

| ASSIGNMENTS   | PAGE | DATE | REMARK |
|---|------|------|--------|
| 1. Write a C program to design a 5D array, store integer values in it and print them.   |      |      |        |
| 2. Write a C program to design a Singly Linked List and perform Insertion at end, Insertion at Beginning, Deletion at Begin, Deletion at End, Insertion at Index, Deletion at Index, Deletion of entire List and Display Linked List operation on it.                     |      |      |        |
| 3. Write a program in C to reverse a singly linked list.  |      |      |        |
| 4. Write a C program to design a Doubly Linked List and perform Insertion at end, Insertion at Beginning, Deletion at Begin, Deletion at End, Insertion at Index, Deletion at Index, Deletion of entire List, Reverse operation, and Display Linked List operation on it. |      |      |        |
| 5. Write a C program to design a Circular Linked List and perform Insertion at end, Insertion at Beginning, Deletion at Begin, Deletion at End, Insertion at Index, Deletion at Index, Deletion of entire List, and Display Circular Linked List operation.               |      |      |        |
| 6. Write a C program to design a Circular Doubly Linked List and perform Insertion at end, Insertion at Beginning, Deletion at Begin, Deletion at End, Insertion at Index, Deletion at Index, Deletion of entire List, and Display Circular Doubly Linked List operation. |      |      |        |
| 7. Write a C program to implement Last in First out (LIFO) data structure and perform Push, Pop, Peek operations on it. Use array to implement the same.  |      |      |        |
| 8. Write a C program to implement Push, Pop, Peek operations of Stack using Linked List.  |      |      |        |
| 9. Write a C program to reverse an array using stack. You need to implement the stack first then use that for reversal.   |      |      |        |
| 10. Write a C program to convert an equation to Postfix and Prefix with the help of a Stack. Implement the Stack using Linked List.   |      |      |        |
| 11. Write a C program to perform First in First out Data Structure. You need to perform Enqueue and Dequeue operation on this data structure.   |      |      |        |
| 12. Write a C program to implement circular queue using array. You need to perform Enqueue and Dequeue operation on this data structure.  |      |      |        |
| 13. Write a C program to implement circular queue using linked list. You need to perform Enqueue and Dequeue operation on this data structure.  |      |      |        |
| 14. Write a C program to implement Deque using array. Perform the operations add to front, add to rear, delete from front, delete from rear, and display.   |      |      |        |
| 15. Write a C program to implement Deque using linked list. Perform the operations add to front, add to rear, delete from front, delete from rear, and display.   |      |      |        |
| 16. Write a C program to implement a Binary Tree and perform Add Node, Delete Node, and Breadth First Traversal operation on it.  |      |      |        |
| 17. Write a C program to implement a Binary Search Tree and perform Add Node, Delete Node. Also perform the Inorder, Preorder, and Postorder traversal on it.   |      |      |        |