

STACK

1. Write a menu driven program to illustrate basic operations of stack using array.
 - a) Push
 - b) Pop
 - c) Traverse
 - d) Exit
2. Write a menu driven program to illustrate basic operations of stack using pointer.
 - a) Push
 - b) Pop
 - c) Traverse
 - d) Exit
3. Write a program to convert Infix Expression into Postfix Expression.
4. Write a program to convert Infix Expression into Prefix Expression.

RECURSION

5. Write a recursive program to find the factorial value of given number.
6. Write a recursive program to find a Fibonacci sequence.
7. Write a recursive program to find GCD of two integers.
8. Write a recursive program to implement TOH problem. (Show the output for 3 disks)

QUEUE

9. Write a menu driven program to illustrate basic operations of Linear queue using array implementation and pointer implementation.
 - a) Enqueue
 - b) Dequeue
 - c) Display all values
 - d) Exit
10. Write a menu driven program to illustrate basic operations of circular queue having following menu:
 - a) Enqueue
 - b) Dequeue
 - c) Traverse
 - d) Exit

LINKED LIST

11. Write a program that uses functions to perform the following operations on singly linked list
 - a) Creation
 - b) Insertion
 - 1) Insertion at beginning
 - 2) Insertion at specified position
 - 3) Insertion at end
 - c) Deletion
 - 1) Deletion from the beginning
 - 2) Deletion from the specified position
 - 3) Deletion from the end

d) Traversal.

e) Exit

12. Write a program that uses functions to perform the following operations on circular linked List

a) Creation

b) Insertion

1) Insertion at beginning

2) Insertion at specified position

3) Insertion at end

c) Deletion

1) Deletion from the beginning

2) Deletion from the specified position

3) Deletion from the end

d) Traversal.

e) Exit

13.

14.