Lab Assignment Data Structure

1. Write a menu driven program to implement following operations on array :
a) Create an array
b) Insert an element
c) Delete an element
d) Search an element
e) Find maximum element
f) Find minimum element

2. Write a menu driven program to implement following operations on Matrix :
a) Add two matrix
b) Multiply two matrix
c) Transpose a matrix
d) Display matrix

3. Write program to implement stack-using array with following operations :
a)Push
b)Pop
c) display

4. Write a menu driven program to implement stack using linked list.

5. Write a program to convert infix expressions to postfix expressions.

6. Write a program to convert infix expressions to prefix expressions.

7. Write a menu driven program to implement a queue using arrays.

8. Write a menu driven program to implement Circular queue.

9. Write a menu driven program to implement Priority queue.

10. Write a menu driven program to implement Dequeue

11. Write a menu driven program to implement following operations on Singly Linked List
a) Create a list
b) Append Element
c) Add element at beginning
d) Add element after the element given
e) Count no of elements in the list
f) Display the elements of list
g) Delete an element
h) sort, merge, update, reverse

12. Write a menu driven program to implement a queue using Linked List.

13. Write a menu driven program to implement following operations on Doubly Linked List.
a) Create a list
b) Append Element
c) Add element at beginning
d) Add element after the element given
e) Count no of elements in the list
f) Display the elements of list
g) Delete an element
h) sort, merge, update, reverse

14. Write a menu driven program to implement Circular Linked List.

15. Write a program to implement linear Search.

16. Write a program to implement Binary Search with recursion.