

## Practical List

1. Conversion of Infix expression to postfix expression using stack.
2. Conversion of Infix expression to prefix expression using stack.
3. Write a program to maintain multiple queues in a single array.
4. Evaluation of Post-fix expression using Stack
5. Write a program to implement Circular Queue.
6. Write a program to implement Priority Queue.
7. Given a singly linked list, determine if it's a palindrome. Return 1 or 0 denoting if it's a palindrome or not, respectively. For example  
List 1-->2-->1 is a palindrome.  
List 1-->2-->3 is not a palindrome.
8. Implement Polynomial addition using linked list concept.
9. Implement Polynomial Multiplication using linked list concept.
10. Implement the following operations on doubly linked lists:
  1. Insert (at position)
  2. sort the list
  3. display.
11. Implement the following operations on doubly linked lists:
  1. Insert (end)
  2. concatenate two list
  3. display.
12. Given a sorted linked list, delete all duplicates such that each element appears only once.  
For example:  
Given 1->1->2, return 1->2.  
Given 1->1->2->3->3, return 1->2->3.
13. Given a linked list and a value x, partition it such that all nodes less than x come before nodes greater than or equal to x. You should preserve the original relative order of the nodes in each of the two partitions.  
For example:  
Input: 1->4->3->2->5->2 and x = 3,  
Output: 1->2->2->4->3->5.
14. Write a program to construct a binary search tree and traverse it with all methods.
15. Write a program to represent the given graph using (adjacency matrix/linked list) and implement Breadth-First Search Traversal for a given Graph.
16. Write a program to represent the given graph using (adjacency matrix/linked list) and implement Depth First Search Traversal for a given Graph.
17. Write a program to implement the Hash Table concept using linear probing.
18. Write a program to implement the Hash Table concept using quadratic probing.
19. Implement the Min Heap tree and sort the elements.
20. Implement the Max Heap tree and sort the elements.