DATA STRUCTURES

PART-1

1. Implement Stack using linked list
2. Implement Queue using linked list
3. Implement stack using queue
4. Implement queue using stack
5. Write a program for how stacks can be used for checking balancing of symbols
6. Write a program for finding the middle node in the single liked list
7. Write a program to reverse the linked list
8. Write a program for finding a loop in the linked list
9. Write a program to check if a singly linked list is palindrome or not
10. Write a program to swap the pairwise elements.
11. Write a program to find the intersection point of two single linked lists

PART-2

12. Write a program to check given binary tree is BST or not
13. Write a program for constructing a BST from given preorder traversal
14. Write a program for finding the height of a binary tree
15. Write a program for Level order traversal
16. Write non-recursive programs for Inorder, Preorder and postorder traversals
17. Write the programs for the following sorting algorithms
    Bubble Sort, Selection Sort, Insertion Sort and Radix Sort
18. Compare the time complexity of all sorting algorithms
19. Write a program (Insertion and Deletion operations) to construct a hash table with linear probing technique
20. Write a program (Insertion and Deletion operations) to construct a hash table with quadratic probing technique