**Part A: Data structure – Lab Questions**

1. Sort a given list of strings
2. Reverse a string using pointers.
3. Implement Pattern matching algorithm.
4. Search an element in the 2-dimensional array
5. Append 2 arrays
6. Search an element in the array using linear search.
7. Search an element in the array using binary search.
8. Read a sparse matrix and display its triplet representation using array.
9. Create a singly linked list of n nodes and display it.
10. Delete a given node from a singly linked list.
11. Sort a singly linked list.
12. Create a singly linked list and search an element from that list.
13. Create a doubly linked list of integers and display in forward and backward direction.
14. Addition of 2 polynomials using array.
15. Implement Stack using array
16. Implement Stack using linked list
17. Evaluation of postfix expression.
18. Implement Queue using array.
19. Implement Queue using linked list.
20. Traverse a binary search tree in preorder
21. Traverse a binary search tree in inorder
22. Traverse a binary search tree in postorder.
23. Search an element in a binary search tree
24. Implement exchange sort
25. Implement selection sort.
26. Implement insertion sort.
27. Implement quick sort.