Data Structures Lab

PART – A

1. Write a menu driven C program to perform the following string operations using pointers (i)String Length (ii) String Concatenation(iii) string reverse

2. Write a program to find the location of a given number using Linear search.

3. Write a C program to search for an element in an array using Binary search.

4. Write a C program to sort a list of N elements using Selection Sort Algorithm.

5. Write a C program to construct a singly linked list and perform insertion at the end, delete specified element and display the elements.

6. Write a C program to demonstrate the working of stack using arrays.

7. Write a C program to generate and Display Path matrix of a graph whose adjacency matrix is given as input.

8. Write a C program to create and traverse a binary search tree using various tree traversals.

PART – B

1.Write a C program to demonstrate the following operations in an array

(i) insertion of an element (ii) deletion of an element (iii) traversal

2. Write a C program to sort a list of elements using Bubble sort algorithm

3. Write a C program to sort a list of N elements using Insertion Sort Algorithm.

4. Write a C program to simulate the working of Linear Queue using arrays.

5. Write a C program to implement a circular queue of integers..

6. Write a C program to generate and Display Shortest Path matrix of a graph whose cost adjacency matrix is given as input.

7. Write a C program to create a directed graph using Adjacency Matrix.