S. No.	Program
1	Write a program in C/C++ to perform the following: a) Create an array of N integers, defined by the user at runtime. b) Display the elements of an array c) Insert the element at the beginning d) Insert the element at the end e) Insert the element after the given position f) Insert the element after the given element in the array g) Delete the given element in the array.
2	Write a program in C/C++ that uses functions to perform the following: a) Create a singly linked list of integers. b) Insert the node at the beginning. c) Insert the node after the given element. d) Delete a node from the list e) Display the elements in the given list
3	Write a program in C/C++ that uses functions to perform the following: a) Create a doubly linked list of integers. b) Delete a given integer from the above doubly linked list. c) Display the contents of the above list after deletion.
4	Write a C program that uses stack operations to convert the followings: a) A given infix expression into its postfix Equivalent b) Evaluate the infix expression using postfix equivalent
5	Write a C/C++ program to implement two stacks using a single 1-D array where the total size of both the stacks is fixed, but the individual sizes of the stacks may differ.
6	Write C programs to implement a double-ended queue (Abstract Data Type) using an array and doubly linked list, respectively.
7	Write a C program that uses functions to perform the following: a) Create a binary search tree of characters. b) Traverse the above Binary search tree recursively in Preorder, Inorder, and Postorder c) Write a function for testing two given trees are symmetric or not
8	Write C programs for implementing the following sorting methods to arrange a list of integers in ascending order: a) Insertion sort b) Bubble sort c) Selection sort d) Merge sort
9	Write a C program to implement all the functions of a dictionary (ADT) using hashing.
10	Write C programs for implementing the following graph traversal algorithms: a) Depth-first traversal b) Breadth-first traversal