K. J. Somaiya College of Engineering, Mumbai - 77
(A Constituent College of Somaiya Vidyavihar University)
Department of Electronics and Computer Engineering

List of programs for DS practical exam

1 Write a C/C++ program to implement addition and subtraction of rational numbers using Abstract Data Type(ADT).

2 Write a C/C++ program to implement addition and subtraction of complex numbers using Abstract Data Type(ADT).

3 Write a C/C++ program to implement multiplication and equality check of rational numbers using Abstract Data Type(ADT).

4 Write a C/C++ program to implement multiplication and equality check of complex numbers using Abstract Data Type(ADT).

5 Write a C/C++ program to insert and delete a number from a given location in an array.

6 Write a C/C++ program to create a singly linked list.

7 Write a C/C++ program to create a circular linked list.

8 Write a C/C++ program to create a doubly linked list.

9 Write a C/C++ program to create a circular doubly linked list.

10 Write a C/C++ program to count the number of nodes in the singly linked list

11 Write a C/C++ program to delete element at the begining/middle/end of singly linkedlist

12 Write a C/C++ program to insert element at the begining/middle/end of singly linkedlist

13 Write a C/C++ program to search a particular number in singly linked listcircular linked list/circular doubly linked list/doubly linked list.

14 Write a C/C++ program to delete a particular node in linked list/circular linked list/circular doubly linked sort/doubly linked list.

15 Write a C/C++ program to count the number of nodes in a circular linked list/circular doubly linked list/doubly linked list.

16 Write a C/C++ program to implement stack operations (PUSH) using array.

17 Write a C/C++ program to implement stack operations (PUSH and POP) using array.

18 Write a C/C++ program to implement stack operation (PUSH) using linked list.

19 Write a C/C++ program to evaluate postfix expressions using stack .

20 Write a C/C++ program to reverse a list of given numbers using stack.

21 Write a C/C++ program to implement Circular/ Priority/Double Ended queue & operation (insert and delete) using array.

22 Write a C/C++ program to implement Circular/ Priority/Double Ended queue & operation (insert and delete) using linked list.

23 Write a C/C++ program to implement BST and find largest node in the tree

24 Write a C/C++ program to implement BST Traversal - preorder, postorder and inorder

25 Write a C/C++ program to count the number of nodes in binary search tree.

26 Write a C/C++ program for sorting using Insertion Sort

27 Write a C/C++ program to implement BST and find smallest node in the tree

28 Write a C/C++ program for sorting using bubble Sort

29 Write a C/C++ program for searching a number using linear search

30 Write a C/C++ program for searching a number using binary search

31 Implement a set and perform addition/ deletion of elements in it in C++ using standard template libraries (STL).

32 Implement a dictionary and display its elements with values in C++ using standard template libraries (STL).

NOTE: Display function needs to be implemented wherever required.

All the programs must be menu driven