Assignment No.	Suggested List of Assignments
	Group A
1	Consider an employee database of N employees. Make use of a hash table implementation toquickly look up the employee's id number.
2	Write a C++ program to implement a singly link list and perform operations such as insert,delete, display, search element from it and reverse the list.
3	Write a C++ program to perform infix to postfix conversion using stack.
4	Write a C++ program to implement the following data structures and its operations using linked list: i) Stack ii) Queue.
5	Write a C++ program to implement a threaded binary tree and its traversal.
6	Write a C++ program to perform the following operations on a height balanced tree: i) Insert a node ii) Search a node iii) Display it in ascending order.
7	Write a C++ program for the implementation of BFS and DFS for a given graph.
8	Write a C++ program to find the minimum spanning tree of a given undirected graph.
9	Write a C++ program to store the monthly salary of an employee in an array. Sort array of numbers in ascending order using Merge sort and Display details of top five employees with the highest salary.
	Group B
10	Write a C++ program to implement a doubly linked list and perform operations such as insert, delete, display and search element from it.
11	Write a C++ program to construct a binary search tree and perform insertion, deletion, searching of a node and its traversal.
12	Write a C++ program to store the monthly salary of an employee in an array. Sort array of numbers in ascending order using Quick sort and Display details of top five employees with the highest salary.

Reference Books:

1. Richard F. Gilberg& Behrouz A. Forouzan, "Data Structures, Pseudo code Approach with C", Cengage Learning India Edition, 2nd Edition, 2007, ISBN 10: 8131503143 / ISBN 13: 9788131503140.
2. Y. Langsam, M. Augenstin and A. Tannenbaum, "Data Structures using C", Pearson Education Asia, First Edition, 2002, ISBN 978-81-317-0229-1.
3. G.A.V. PAI, "Data Structures and Algorithms, Concepts, Techniques and Applications", Tata McGraw-Hill, Volume1 1st Edition, 2017. ISBN-10: 0070667268/ ISBN-13: 978-0070667266.
4. Y. Langsam, M. Augenstinand, A. Tannenbaum,"Data Structures using C & C++",Pearson Education India, Second Edition,2015, ISBN 10: 9332549311, ISBN 13: 978-9332549319.