

KCA253:DATA STRUCTURES & ANALYSIS OF ALGORITHMS LAB**Course Outcome (CO)****Bloom's
Knowledge
Level (KL)****At the end of course , the student will be able to**

CO1	Write and execute programs to implement various searching and sorting algorithms.	K ₃
CO2	Write and execute programs to implement various operations on two-dimensional arrays.	K ₃
CO3	Implement various operations of Stacks and Queues using both arrays and linked lists data structures.	K ₃
CO4	Implement graph algorithm to solve the problem of minimum spanning tree	K ₃

Program in C or C++ for following:

1. To implement addition and multiplication of two 2D arrays.
2. To transpose a 2D array.
3. To implement stack using array
4. To implement queue using array.
5. To implement circular queue using array.
6. To implement stack using linked list.
7. To implement queue using linked list.
8. To implement BFS using linked list.
9. To implement DFS using linked list.
10. To implement Linear Search.
11. To implement Binary Search.
12. To implement Bubble Sorting.
13. To implement Selection Sorting.
14. To implement Insertion Sorting.
15. To implement Merge Sorting.
16. To implement Heap Sorting.
17. To implement Matrix Multiplication by strassen's algorithm
18. Find Minimum Spanning Tree using Kruskal's Algorithm