**Data Structure Practical List.**

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| **Sr. No.** | **Practicals Name.** |
| 1 | Write a program to implement stack using arrays. |
| 2 | Write a program to evaluate a given postfix expression using stacks. |
| 3 | Write a program to convert a given infix expression to postfix form using stacks. |
| 4 | Write a program to implement circular queue using arrays. |
| 5 | Write a program to implement double ended queue (dequeue) using arrays. |
| 6 | Write a program to implement a stack using two queues such that the push operation  runs in constant time and the pop operation runs in linear time. |
| 7 | Write a program to implement a stack using two queues such that the push operation  runs in linear time and the pop operation runs in constant time. |
| 8 | Write a program to implement a queue using two stacks such that the enqueue  operation runs in constant time and dequeue operation runs in linear time. |
| 9 | Write programs to implement the following data structures: (a) Single linked list (b)  Double linked list. |
| 10 | Write a program to implement a stack using a linked list such that the push and pop  operations of stack still take O(1) time. |
| 11 | Write a program to implement hashing with (a) Separate Chaining and (b) Open  addressing methods. |
| 12 | 14. Implement the following sorting algorithms: (a) Insertion sort (b) Merge sort (c)  Quick sort (d) Heap sort. |

**Skipped Practicals.**

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| **Sr. No.** | **Practicals Name.** |
| 1 | Write a program to construct an AVL tree for the given set of keys. Also write  function for deleting a key from the given AVL tree. |
| 2 | Write a program to create a binary search tree (BST) by considering the keys in  given order and perform the following operations on it. (a) Minimum key (b)  Maximum key (c) Search for a given key (d) Find predecessor of a node (e) Find  successor of a node (f) delete a node with given key. |
| 3 | Write programs for implementation of graph traversals by applying: (a) BFS (b)  DFS |