

B.Tech I Year II Semester (CSE, DS, IT, AI&ML)
Data Structures Lab

List of Programms

1. Write a program that uses functions to perform the following operations on a singly linked list: i) Creation ii) Insertion iii) Deletion iv) Traversal
2. Write a program that uses functions to perform the following operations on a doubly linked list: i) Creation ii) Insertion iii) Deletion iv) Traversal
3. Write a program that uses functions to perform the following operations on a circular linked list: i) Creation ii) Insertion iii) Deletion iv) Traversal
4. Write a program that implements a stack (its operations) using: i) Arrays ii) Linked Lists
5. Write a program that implements a queue (its operations) using: i) Arrays ii) Linked Lists
6. Write a program that implements the following sorting methods to sort a given list of integers in ascending order: i) Radix Sort ii) Heap Sort
7. Write a program to implement the tree traversal methods (Recursive and Non-Recursive).
8. Write a program to implement: i) Binary Search tree ii) AVL Trees
9. Write a program to implement the graph traversal methods.
10. Write a program to implement the following Hash Functions: i) Division Method ii) Multiplication Method