

Assignment for BCA IYR IV SEM SUB- DATA STRUCTURE AND ALGORITHM

1. Explain Basic terminology.
2. What is Data structure? Explain type of Data Structure
3. Explain Data structure operation.
4. Explain Complexity and time space of a algorithm
5. Explain Linear array
6. Explain representation of linear array in memory
7. Explain traversing linear array.
8. Write a algorithm for inserting a element in a linear array
9. Write a algorithm for deleting a element in a linear array
10. Explain Binary Search method.
11. Explain linear search method
12. Explain bubble sort
13. Explain insertion sort
14. Explain selection sort
15. Explain linked list in detail.
16. Explain Representation of Linked list in memory
17. Write a algorithm for searching a element in linked list.
18. Explain Garbage collection
19. Write a algorithm for inserting a element in a Linked list.
20. Write a algorithm for deleting a element in a linked list.
21. Explain STACK in detail.
22. Explain Array representation of stacks
23. Explain Arithmetic expression
24. What is recursion in detail
25. What is Queues?
26. Explain Deques.
27. Explain Priority Queue
28. Explain Terminology of Binary tree
29. Explain Types of Binary tree
30. Explain Header Nodes.
31. Explain Threads.

NOTE : LAST DATE OF SUBMISSION IS 05 MARCH 2025