Data Structures Oral

Question Bank

The questions given below are just for giving an idea of what type of questions may be asked during oral exam. It is not necessary that same questions will be asked.

1. What is data structure?
2. Define data structures.
3. What are different types of data structures?
4. Differentiate between linear and non-linear data structures.
5. Differentiate between array and linked list.
6. What is self-referential data type?
7. What are the applications of stack?
8. Specify the steps of the algorithm to convert infix expression to postfix expression using stack.
9. What are the steps of the algorithm to evaluate postfix expression using stack.
10. How node structures is defined in a singly linked list/circular linked list/doubly linked list?
11. Difference between singly linked list/circular linked list/doubly linked list.
12. How the operations(insert/delete/traverse) are performed on a specific data structure.
13. Show with example how insert/delete/traverse operations are performed on a binary search tree.
14. What are the applications of a tree data structure?
15. Choose appropriate data structure for a given application.
16. Mention different ways of representing graphs data structure.
17. Differentiate adjacency matrix and adjacency list representation of graph
18. Give applications of graph data structure.
19. Explain how DFS/BFS works?
20. Write a program to perform specific operation on a data structure.