

# 1 Lecture - CS301

## Important Mcqs

1. Which data structure follows the "last-in-first-out" (LIFO) principle? a. Queue b. Stack c. Linked List d. Tree **Solution: b**
2. Which data structure allows for efficient insertion and deletion operations in the middle? a. Array b. Stack c. Queue d. Linked List **Solution: d**
3. Which data structure is used to represent hierarchical relationships? a. Array b. Stack c. Queue d. Tree **Solution: d**
4. Which data structure is used to find the shortest path between two nodes in a network? a. Array b. Stack c. Queue d. Graph **Solution: d**
5. Which data structure stores elements in a non-linear and hierarchical manner? a. Array b. Stack c. Queue d. Tree **Solution: d**
6. Which data structure follows the "first-in-first-out" (FIFO) principle? a. Queue b. Stack c. Linked List d. Tree **Solution: a**
7. Which data structure is used to reverse the order of elements in a sequence? a. Array b. Stack c. Queue d. Linked List **Solution: b**
8. Which data structure is used to implement a symbol table? a. Array b. Stack c. Queue d. Hash table **Solution: d**
9. Which data structure is used to sort elements in a sequence? a. Array b. Stack c. Queue d. Heap **Solution: d**
10. Which data structure is used to store and access elements based on a key-value pair? a. Array b. Stack c. Queue d. Dictionary **Solution: d**