

Data Structures and Algorithms (DSA) Syllabus

1. Introduction to DSA

- Importance of Data Structures
- Algorithms and Time Complexity

2. Arrays and Strings

- Array Operations
- String Manipulation

3. Linked Lists

- Singly Linked List
- Doubly and Circular Linked Lists

4. Stacks and Queues

- Stack Operations
- Queue and Deque

5. Trees and Graphs

- Binary Trees and Binary Search Trees
- Graph Representations and Traversals

6. Sorting and Searching

- Bubble, Quick, Merge Sorts
- Binary and Linear Search

7. Dynamic Programming

- Introduction and Problem Solving