**Roadmap For Practicing Data Structures and Algorithms**

Practice Link

<https://www.codingninjas.com/codestudio/guided-paths/data-structures-algorithms>

* Arrays & Strings
* Basic Array and Strings Questions
* Kadane's Algorithm
* Dutch National Flag Algorithm
* Sliding Window
* Two pointers
* Multidimensional arrays
* Traversal Based Problems
* Rotation Based Problems
* Recursion And Backtracking
* Basic Recursion Questions
* Divide And Conquer
* Sorting Algorithms
* Insertion Sort
* Selection Sort
* Binary Search Applications
* Binary Search on Arrays
* Binary Search on Matrix
* Linked Lists
* Reversal Problems
* Sorting Problems
* Slow And Fast Pointers
* Modify In Linked list
* Stacks & Queues
* Implementation Based Problems
* Application Based Problems
* Binary Trees
* Tree Traversals
* Construction Of Trees
* Tree Views
* Standard Problems
* BST
* Construction Of BST
* Conversion Based Problems
* Modification in BST
* Standard Problems
* Priority Queues and Heaps
* Implementation Based problems
* Conversion based problems
* K Based Problems

Graphs

* Graph Traversals - BFS And DFS
* MST
* Shortest Path Algorithms
* Topological Sort
* Graphs in Matrix
* Dynamic Programming
* DP with Arrays
* DP With Strings
* DP With Maths
* DP With Trees
* Breaking And Partition Based Problems
* Counting Based Problems
* Hard Recursion and Backtracking Questions
* Other Topics
* Hashmaps
* Tries
* Bit Manipulation
* Greedy
* Circular Queues
* Deques - Hot Topic
* Doubly And Circular LL
* String Algorithms like KMP and Z Algorithm