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 Algoritms
  - 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