Data Structures

1. Recursion
   1. GCD
   2. Palindrome
2. Divide And Conquer
   1. Binary Search
   2. Tower of Hanoi
   3. Maximum Subsequence and Subarray
3. Backtracking
   1. N queen problem
4. Sorting
   1. Bubble Sort
   2. Modified Bubble Sort
   3. Shaker Sort
   4. Selection Sort
   5. Insertion Sort
   6. Shell Sort
   7. Merge Sort
   8. Quick Sort
   9. Heap Sort
   10. Binary Tree Sort
   11. Bucket Sort
   12. Radix Sort
   13. Count Sort
   14. Tim Sort
   15. Pigeonhole Sort
   16. Cocktail Sort
   17. Strand Sort
       1. Gnome Sort
       2. Odd Even Sort
5. Searching
   1. Linear Search
   2. Binary Search
   3. Jump Search
   4. Interpolation Search
   5. Exponential Search
6. Arrays
   1. Circular Array
7. Stack
   1. Queue using Stack
   2. Infix to postfix to prefix conversion
   3. Advanced Balanced Parentheses
8. Queue
   1. LRU
   2. Priority Queue
9. Linked List
   1. Insertion
   2. Deletion
   3. Sort
10. Binary Tree
    1. Traversals- Inorder, Preorder, Postorder
    2. Insertion
    3. Deletion
    4. Minimum Spanning Tree
    5. Expression Tree and Evaluation
11. Binary Search Tree
    1. Traversals- Inorder, Preorder, Postorder
    2. Insertion
    3. Deletion
12. Heap
    1. Insertion
    2. Deletion
13. Graphs
    1. BFS
    2. DFS
    3. Minimum Spanning Tree- Prims and Kruskals
    4. Backtracking- N queen
    5. Shortest Path- Djikstra