Master Recursion And Backtracking

- Recursion
  - ~~Function Caling Function Itself~~
  - Bigger Problem Solved by Solving Smaller Subproblems
- Learn 3 Steps Like PMI
  - Base Case (Solve for smallest subproblem)
  - Induction Hypothesis (Assume for n-1)
  - Induction Step (Solve for nth step)
- Basic Problems
  - Factorial
  - Fibonacci
  - Nth Term Of GP
    - https://www.codingninjas.com/codestudio/problems/nth-term-of-gp_797999
  - Tower Of Hanoi
    - https://www.codingninjas.com/codestudio/problems/tower-of-hanoi_981323
- Problems Of Recursion On Arrays
  - Merge Sort
    - https://www.codingninjas.com/codestudio/problems/merge-sort_920442
  - Quick Sort
    - https://www.codingninjas.com/codestudio/problems/quick-sort_983625
- Problems Of Recursion On Strings
  - Remove Consecutive Duplicates
    - https://www.codingninjas.com/codestudio/problems/remove-consecutive-duplicates_893195
  - Convert String To Integer
    - https://www.codingninjas.com/codestudio/problems/atoi_981270
- Recursion On Linked List
  - Reverse Linked List
    - https://www.codingninjas.com/codestudio/problems/reverse-linked-list_920513
  - Merge Sort Linked List
    - https://www.codingninjas.com/codestudio/problems/merge-sort-linked-list_920473
- Trees, Binary Trees, BST
- Backtracking Problems
  - Exploring All The Paths

- Valid Sudoku?
  - https://www.codingninjas.com/codestudio/guided-paths/data-structures-algorithms/content/118522/offering/1380919
- N Queens
  - https://www.codingninjas.com/codestudio/guided-paths/data-structures-algorithms/content/118522/offering/1380923
- Paths In Maze
  - https://www.codingninjas.com/codestudio/guided-paths/data-structures-algorithms/content/118522/offering/1380921
- Recursion Hard Problems -Interview Based
  - Print Permutations
    - https://www.codingninjas.com/codestudio/guided-paths/data-structures-algorithms/content/118522/offering/1380929
  - Subsequences Of String
    - https://www.codingninjas.com/codestudio/guided-paths/data-structures-algorithms/content/118522/offering/1380932
  - Combination Sum
    - https://www.codingninjas.com/codestudio/guided-paths/data-structures-algorithms/content/118522/offering/1380933
  - Return Subsets Sum To K
    - https://www.codingninjas.com/codestudio/guided-paths/data-structures-algorithms/content/118522/offering/1380917
- To Solve More Problems
  - Recursion And Backtracking List
    - https://www.codingninjas.com/codestudio/problem-lists/top-recursion-and-backtracking-interview-questions
  - Guided Path For Data Structures And Algorithms
    - https://www.codingninjas.com/codestudio/guided-paths/data-structures-algorithms