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>