

# Depth-first Search

Example 1:

Input: "()()()")

Output: ["()()()")", "()()()")"]

Example 2:

Input: "(a)()()")

Output: ["(a)()()")", "(a()()()")"]

Example 3:

Input: ")("

Output: [""]

301 Remove Invalid Parentheses (/problems/remove-invalid-parentheses)

? 124 Binary Tree Maximum Path Sum (/problems/binary-tree-maximum-path-sum)

may need to redo this.

redid, Aug 18, 2019 8:52 PM

actually more like a tree problem, should do it in tree topic.

394 Decode String (/problems/decode-string) need to do it again

stack problem! done at Aug 20, 2019 9:50 AM

以上必做

959 Regions Cut By Slashes (/problems/regions-cut-by-slashes)

union find problem.

another way to solve this problem is by replace '\' with

0 1 1

1 0 1

1 1 0,

and do the same thing as count islands.

will redo it later. Aug 20, 2019 10:48 AM

133 Clone Graph (/problems/clone-graph)

need to do this again using dfs.

547 Friend Circles (/problems/friend-circles)

usage of list in python.

679 24 Game (/problems/24-game)

redo it later, Aug 20,  
2019 7:33 PM

207 Course Schedule (/problems/course-schedule)

redo it, Aug 20, 2019 7:52 PM

329 Longest Increasing Path in a Matrix (/problems/longest-increasing-path-in-a-matrix)

need redo, Aug 20, 2019 4:15 PM,

332 Reconstruct Itinerary (/problems/reconstruct-itinerary)

redo it, Aug 21, 2019 8:57 AM

947 Most Stones Removed with Same Row or Column (/problems/most-stones-removed-with-same-row-or-column)

need to redo, sth like union find problem, Aug 21, 2019 9:23 AM

743 Network Delay Time (/problems/network-delay-time)

need redo many many times! Aug 21, 2019 10:18 AM

489 Robot Room Cleaner (/problems/robot-room-cleaner) 🏠

do it again, Aug 21, 2019 1:01 PM

834 Sum of Distances in Tree (/problems/sum-of-distances-in-tree)

can't understand the solution  $O(N)$

need to understand this solution, <https://leetcode.com/problems/surrounded-regions/discuss/41630/9-lines-Python-148-ms>

130 Surrounded Regions (/problems/surrounded-regions)









542 01 Matrix (/problems/01-matrix)

529 Minesweeper (/problems/minesweeper)








417 Pacific Atlantic Water Flow (/problems/pacific-atlantic-water-flow)

638 Shopping Offers (/problems/shopping-offers)

980	Unique Paths III (/problems/unique-paths-iii)	<input type="checkbox"/>
113	Path Sum II (/problems/path-sum-ii)	<input type="checkbox"/>
117	Populating Next Right Pointers in Each Node II (/problems/populating-next-right-pointers-in-each-node-ii)	<input type="checkbox"/>
733	Flood Fill (/problems/flood-fill)	<input type="checkbox"/>
494	Target Sum (/problems/target-sum)	<input type="checkbox"/>
872	Leaf-Similar Trees (/problems/leaf-similar-trees)	<input type="checkbox"/>
924	Minimize Malware Spread (/problems/minimize-malware-spread)	<input type="checkbox"/>
513	Find Bottom Left Tree Value (/problems/find-bottom-left-tree-value)	<input type="checkbox"/>
897	Increasing Order Search Tree (/problems/increasing-order-search-tree)	<input type="checkbox"/>
863	All Nodes Distance K in Binary Tree (/problems/all-nodes-distance-k-in-binary-tree)	<input type="checkbox"/>
129	Sum Root to Leaf Numbers (/problems/sum-root-to-leaf-numbers)	<input type="checkbox"/>
210	Course Schedule II (/problems/course-schedule-ii)	<input type="checkbox"/>
664	Strange Printer (/problems/strange-printer)	<input type="checkbox"/>
749	Contain Virus (/problems/contain-virus)	<input type="checkbox"/>
430	Flatten a Multilevel Doubly Linked List (/problems/flatten-a-multilevel-doubly-linked-list)	<input type="checkbox"/>
515	Find Largest Value in Each Tree Row (/problems/find-largest-value-in-each-tree-row)	<input type="checkbox"/>
559	Maximum Depth of N-ary Tree (/problems/maximum-depth-of-n-ary-tree)	<input type="checkbox"/>
366	Find Leaves of Binary Tree (/problems/find-leaves-of-binary-tree) 	<input type="checkbox"/>
785	Is Graph Bipartite? (/problems/is-graph-bipartite)	<input type="checkbox"/>
721	Accounts Merge (/problems/accounts-merge)	<input type="checkbox"/>
778	Swim in Rising Water (/problems/swim-in-rising-water)	<input type="checkbox"/>
971	Flip Binary Tree To Match Preorder Traversal (/problems/flip-binary-tree-to-match-preorder-traversal)	<input type="checkbox"/>
472	Concatenated Words (/problems/concatenated-words)	<input type="checkbox"/>

491	Increasing Subsequences (/problems/increasing-subsequences)	<input type="checkbox"/>
928	Minimize Malware Spread II (/problems/minimize-malware-spread-ii)	<input type="checkbox"/>
841	Keys and Rooms (/problems/keys-and-rooms)	<input type="checkbox"/>
490	The Maze (/problems/the-maze) 	<input type="checkbox"/>
756	Pyramid Transition Matrix (/problems/pyramid-transition-matrix)	<input type="checkbox"/>
694	Number of Distinct Islands (/problems/number-of-distinct-islands) 	<input type="checkbox"/>
968	Binary Tree Cameras (/problems/binary-tree-cameras)	<input type="checkbox"/>
488	Zuma Game (/problems/zuma-game)	<input type="checkbox"/>
1028	Recover a Tree From Preorder Traversal (/problems/recover-a-tree-from-preorder-traversal)	<input type="checkbox"/>
1110	Delete Nodes And Return Forest (/problems/delete-nodes-and-return-forest)	<input type="checkbox"/>
802	Find Eventual Safe States (/problems/find-eventual-safe-states)	<input type="checkbox"/>
934	Shortest Bridge (/problems/shortest-bridge)	<input type="checkbox"/>
711	Number of Distinct Islands II (/problems/number-of-distinct-islands-ii) 	<input type="checkbox"/>
323	Number of Connected Components in an Undirected Graph (/problems/number-of-connected-components-in-an-undirected-graph) 	<input type="checkbox"/>
261	Graph Valid Tree (/problems/graph-valid-tree) 	<input type="checkbox"/>
505	The Maze II (/problems/the-maze-ii) 	<input type="checkbox"/>
685	Redundant Connection II (/problems/redundant-connection-ii)	<input type="checkbox"/>
576	Out of Boundary Paths (/problems/out-of-boundary-paths)	<input type="checkbox"/>
737	Sentence Similarity II (/problems/sentence-similarity-ii) 	<input type="checkbox"/>
1026	Maximum Difference Between Node and Ancestor (/problems/maximum-difference-between-node-and-ancestor)	<input type="checkbox"/>
439	Ternary Expression Parser (/problems/ternary-expression-parser) 	<input type="checkbox"/>
514	Freedom Trail (/problems/freedom-trail)	<input type="checkbox"/>
1034	Coloring A Border (/problems/coloring-a-border)	<input type="checkbox"/>
473	Matchsticks to Square (/problems/matchsticks-to-square)	<input type="checkbox"/>

以上选做

827	Making A Large Island (/problems/making-a-large-island)	<input type="text"/>
886	Possible Bipartition (/problems/possible-bipartition)	<input type="text"/>
839	Similar String Groups (/problems/similar-string-groups)	<input type="text"/>
988	Smallest String Starting From Leaf (/problems/smallest-string-starting-from-leaf)	<input type="text"/>
499	The Maze III (/problems/the-maze-iii) 	<input type="text"/>
1020	Number of Enclaves (/problems/number-of-enclaves)	<input type="text"/>
533	Lonely Pixel II (/problems/lonely-pixel-ii) 	<input type="text"/>
851	Loud and Rich (/problems/loud-and-rich)	<input type="text"/>
531	Lonely Pixel I (/problems/lonely-pixel-i) 	<input type="text"/>
1080	Insufficient Nodes in Root to Leaf Paths (/problems/insufficient-nodes-in-root-to-leaf-paths)	<input type="text"/>
1123	Lowest Common Ancestor of Deepest Leaves (/problems/lowest-common-ancestor-of-deepest-leaves)	<input type="text"/>
1145	Binary Tree Coloring Game (/problems/binary-tree-coloring-game)	<input type="text"/>
1059	All Paths from Source Lead to Destination (/problems/all-paths-from-source-lead-to-destination) 	<input type="text"/>
1102	Path With Maximum Minimum Value (/problems/path-with-maximum-minimum-value) 	<input type="text"/>
1061	Lexicographically Smallest Equivalent String (/problems/lexicographically-smallest-equivalent-string) 	<input type="text"/>
1136	Parallel Courses (/problems/parallel-courses) 	<input type="text"/>

