

RECURSION :

The process in which a function calls itself directly or indirectly is called recursion and the corresponding function is called a recursive function. Using a recursive algorithm, certain problems can be solved quite easily. Examples of such problems are **Towers of Hanoi (TOH)**, **Inorder/Preorder/Postorder Tree Traversals**, **DFS of Graph**, etc.

Day 1 and Day 2:

[Try it in your own pace, but within 2 days :)]

First, complete all the problems given in link 1. That will be more than sufficient to get comfortable with recursion.

1. <https://leetcode.com/explore/learn/card/recursion-i/>
2. <https://practice.geeksforgeeks.org/problems/recursively-remove-all-adjacent-duplicates/0>
3. <https://practice.geeksforgeeks.org/problems/print-pattern/0>
4. <https://practice.geeksforgeeks.org/problems/handshakes/0>
5. <https://practice.geeksforgeeks.org/problems/express-as-sum-of-power-of-natural-numbers/0>
6. <https://practice.geeksforgeeks.org/problems/sum-string/0>
7. <https://practice.geeksforgeeks.org/problems/combination-sum/0>

Other materials (if you are interested):

- <https://leetcode.com/explore/learn/card/recursion-ii/> (I'd recommend it for placement prep)
- <https://www.geeksforgeeks.org/all-possible-binary-numbers-of-length-n-with-equal-sum-in-both-halves/>
- <https://www.geeksforgeeks.org/generate-binary-strings-without-consecutive-1s/>
- <https://www.geeksforgeeks.org/print-increasing-sequences-length-k-first-n-natural-numbers/>
- <https://www.geeksforgeeks.org/reverse-a-stack-using-recursion/>
- <https://www.geeksforgeeks.org/find-middle-singly-linked-list-recursively/>
- <https://www.geeksforgeeks.org/power-set-lexicographic-order/>
- <https://www.geeksforgeeks.org/generate-all-possible-sorted-arrays-from-alternate-elements-of-two-given-arrays/>
- <https://www.geeksforgeeks.org/generate-passwords-given-character-set/>