

ASSIGNMENT 2

Submission link : <https://forms.gle/4f5syJ4nwuknTYQi8>

1. Basics of Data Structures

Go through the entire playlist and make notes.

https://www.youtube.com/playlist?list=PL2_aWCzGMAwI3W_JlcBbtYTwIQSsOTa6P

Data structures to get familiar are:

- ***Arrays, (<https://www.geeksforgeeks.org/array-data-structure/>)
- ***Strings, (<https://www.geeksforgeeks.org/string-data-structure/>)
- ***Matrix, (<https://www.geeksforgeeks.org/matrix/>)
- **Stack, (<https://www.geeksforgeeks.org/stack-data-structure/>)
- **Queue, (<https://www.geeksforgeeks.org/queue-data-structure/>)
- ***Linked List, (<https://www.geeksforgeeks.org/data-structures/linked-list/>)
- ***Binary Tree, (<https://www.geeksforgeeks.org/binary-tree-data-structure/>)
- **Binary Search Tree(<https://www.geeksforgeeks.org/binary-search-tree-data-structure/>)
- **Heap, (<https://www.geeksforgeeks.org/heap-data-structure/>)
- *Graph (<https://www.geeksforgeeks.org/graph-data-structure-and-algorithms/>)

NOTE: No of stars before the topic name indicates relative importance, 3* being most and 1* being Least. So give appropriate importance.

2. Algorithms

Go through the entire playlist and make notes.

https://www.youtube.com/playlist?list=PLDN4rrl48XKpZkf03iYFI-O29szjTrs_O

3. Coding

Arrays:

1. <https://leetcode.com/problems/container-with-most-water/>
2. <https://leetcode.com/problems/4sum/>

Strings:

1. <https://leetcode.com/problems/generate-parentheses/>

Hashtable:

1. <https://leetcode.com/problems/group-anagrams/>
2. <https://leetcode.com/problems/set-matrix-zeroes/>

Binary tree:

1. <https://leetcode.com/problems/kth-smallest-element-in-a-sorted-matrix/>
2. <https://leetcode.com/problems/find-k-closest-elements/>

DP:

1. <https://leetcode.com/problems/unique-paths/>
2. <https://leetcode.com/problems/unique-paths-ii/>
3. <https://leetcode.com/problems/minimum-path-sum/>

Greedy:

1. <https://leetcode.com/problems/best-time-to-buy-and-sell-stock-ii/>
2. <https://leetcode.com/problems/remove-duplicate-letters/>