

HACKERSPACE

TOPIC: DSA LECTURE

1. Array (15 mins):

a. Concept about array

Questions & Answer

1. Kadane's Algorithm =>

<https://leetcode.com/problems/maximum-subarray/>

2. Majority Element ($>n/2$ times) =>

<https://leetcode.com/problems/majority-element/>

Practice Problem

1. https://www.codingninjas.com/studio/problems/longest-subarray-with-sum-k_6682399?leftPanelTabValue=PROBLEM

2. <https://leetcode.com/problems/remove-duplicates-from-sorted-array/>

3. <https://leetcode.com/problems/find-peak-element/> (Binary Search)

2. Linkedlist (10 min):

a. Concept of Linked List

Question & Answer

1. Delete Specific Node =>

<https://leetcode.com/problems/remove-linked-list-elements/description/>

Practice Problem

1. <https://leetcode.com/problems/reverse-linked-list/>

2. <https://leetcode.com/problems/intersection-of-two-linked-lists/>

3. Recursion (10 mins):

a. Concept of Recursion

Question & Answer

1. Fibonacci Sum =>

<https://leetcode.com/problems/fibonacci-number/>

Practice Problem

1. <https://leetcode.com/problems/combination-sum/description/>

2. <https://practice.geeksforgeeks.org/problems/rat-in-a-maze-problem/1>

4. Dynamic Programming (15 min)

a. Fibonacci continuation

Practice Problem

1. <https://practice.geeksforgeeks.org/problems/0-1-knapsack-problem0945/1>

3. Tree (15 mins):

- a. Concept of Tree (Not original tree lol)
- b. Binary Tree
- c. Binary Search Tree

Question & Answer

- 1. Search in binary tree =>

<https://leetcode.com/problems/search-in-a-binary-search-tree/description/>

Practice problem

- 1. <https://leetcode.com/problems/insert-into-a-binary-search-tree/>

- Thanks & Regards
Krishnendu Roy