### **DSA Winter Bootcamp 2.0**

## 0. Warm-up

- 1. Running Sum of 1d Array
- 2. Find the Highest Altitude
- 3. Squares of a Sorted Array
- 4. Move Zeroes
- 5. Jewels and Stones
- 6. Fizz Buzz
- 7. Valid Anagram
- 8. Reverse Vowels of a String
- 9. Valid Palindrome
- Basic Understanding of Data structures in your language (C++ STL, C# Collections, Python Standard Library)
  - o In C++: <a href="https://youtu.be/RRVYpIET\_RU?si=xI1JBIVbtCki">https://youtu.be/RRVYpIET\_RU?si=xI1JBIVbtCki</a> Ig7
- If you like C++ and more details > My code school Data Structures
  - https://www.youtube.com/playlist?list=PL2\_aWCzGMAwl3W\_JlcBbtYTwiQSsOTa 6P (C++)
- If you like Python > code basics Data Structures
  - o <a href="https://www.youtube.com/playlist?list=PLeo1K3hjS3uu\_n\_a\_Ml\_KktGTLYopZ12">https://www.youtube.com/playlist?list=PLeo1K3hjS3uu\_n\_a\_Ml\_KktGTLYopZ12</a>

## 1. Arrays && Hashing

- 1. Two Sum
- 2. Contains Duplicate
- 3. Best Time to Buy and Sell Stock
- 4. Product of Array Except Self
- 5. Maximum Subarray
- 6. Merge Intervals
- 7. Find the Difference of Two Arrays
- 8. Subarray Sum Equals K
- 9. Longest Consecutive Sequence
- 10. <u>4Sum</u>

## 2. Strings

- 11. Reverse String
- 12. Merge Strings Alternately
- 13. Longest Substring Without Repeating Characters
- 14. Valid Parentheses
- 15. Roman to Integer

- 16. Integer to Roman
- 17. Repeated substring pattern
- 18. Isomorphic Strings
- 19. Is Subsequence

## 3. Sliding Window

- 21. Maximum Average Subarray I
- 22. Minimum Window Substring
- 23. Sliding Window Maximum
- 24. Longest Repeating Character Replacement
- 25. Longest Substring with At Most Two Distinct Characters

#### 4. Two Pointers

- 26. Reverse String
- 27. Move Zeroes
- 28. Remove Duplicates from Sorted Array
- 29. Trapping Rain Water
- 30.3Sum

## 5. Binary Search

- 31. Binary Search
- 32. Search in Rotated Sorted Array
- 33. Find Minimum in Rotated Sorted Array
- 34. Median of Two Sorted Arrays
- 35. Split Array Largest Sum

#### 6. Linked List

- 36. Reverse Linked List
- 37. Merge Two Sorted Lists
- 38. Linked List Cycle
- 39. Remove Nth Node From End of List
- 40. Add Two Numbers

# 7. Trees and Binary Search Trees

- 41. Invert Binary Tree
- 42. Binary Tree Level Order Traversal

- 43. Validate Binary Search Tree
- 44. Lowest Common Ancestor of a Binary Search Tree
- 45. Serialize and Deserialize Binary Tree