**Sliding window algorithm**

1. Two Sum:

- Problem Statement: Given an array of integers, find two numbers such that they add up to a specific target.

- Difficulty: Easy

- Platform: LeetCode

2. Longest Substring Without Repeating Characters:

- Problem Statement: Find the length of the longest substring without repeating characters in a given string.

- Difficulty: Medium

- Platform: LeetCode

3. Minimum Size Subarray Sum:

- Problem Statement: Given an array of positive integers and a target sum, find the minimum length of a contiguous subarray whose sum is greater than or equal to the target.

- Difficulty: Medium

- Platform: LeetCode

4. Maximum Sum Subarray of Size K:

- Problem Statement: Given an array of integers and a positive integer K, find the maximum sum of a subarray of size K.

- Difficulty: Medium

- Platform: GeeksforGeeks / LeetCode

5. Longest Repeating Character Replacement:

- Problem Statement: Given a string, find the length of the longest substring that contains only one repeating character and you can replace at most k characters.

- Difficulty: Medium

- Platform: LeetCode

6. Fruit Into Baskets:

- Problem Statement: In a row of trees, find the maximum number of fruits you can collect with two baskets.

- Difficulty: Medium

- Platform: LeetCode

7. Longest Subarray with Ones After Replacement:

- Problem Statement: Given an array of 0s and 1s, find the length of the longest subarray containing only 1s, and you are allowed to replace at most k 0s.

- Difficulty: Medium

- Platform: LeetCode

8. Max Consecutive Ones III:

- Problem Statement: Given an array A of 0s and 1s, you are allowed to change at most K 0s to 1s. Return the length of the longest (contiguous) subarray that contains only 1s.

- Difficulty: Medium

- Platform: LeetCode

9. Longest Word in Dictionary through Deleting:

- Problem Statement: Given a string and a string dictionary, find the longest string in the dictionary that can be formed by deleting some characters of the given string.

- Difficulty: Medium

- Platform: LeetCode

10. Permutation in String:

- Problem Statement: Given two strings s1 and s2, write a function to return true if s2 contains the permutation of s1.

- Difficulty: Medium

- Platform: LeetCode

11. Minimum Window Substring:

- Problem Statement: Given two strings s and t, return the minimum window in s which will contain all the characters in t in complexity O(n).

- Difficulty: Hard

- Platform: LeetCode

12. Subarray Product Less Than K:

- Problem Statement: Given an array A of positive integers, find the total number of contiguous subarrays whose product is less than k.

- Difficulty: Medium

- Platform: LeetCode

13. Longest Mountain in Array:

- Problem Statement: Given an array A, find the length of the longest mountain.

- Difficulty: Medium

- Platform: LeetCode

14. Find All Anagrams in a String:

- Problem Statement: Given a string s and a non-empty string p, find all the start indices of p's anagrams in s.

- Difficulty: Medium

- Platform: LeetCode

15. Number of Longest Increasing Subsequence:

- Problem Statement: Given an unsorted array of integers, find the number of longest increasing subsequences.

- Difficulty: Hard

- Platform: LeetCode

16. Find K-Length Substrings With No Repeated Characters:

- Problem Statement: Given a string S, return the number of substrings of length K with no repeated characters.

- Difficulty: Medium

- Platform: LeetCode

17. Longest Continuous Increasing Subsequence:

- Problem Statement: Given an unsorted array of integers, find the length of the longest continuous increasing subsequence.

- Difficulty: Easy

- Platform: LeetCode

18. Equal Average Partition:

- Problem Statement: Given an array, determine if it can be partitioned into two subarrays of equal average.

- Difficulty: Hard

- Platform: LeetCode

19. Subarray Sums Divisible by K:

- Problem Statement: Given an array A of integers, return the number of (contiguous, non-empty) subarrays that have a sum divisible by K.

- Difficulty: Medium

- Platform: LeetCode

20. Partition Labels:

- Problem Statement: A string S of lowercase English letters is given. We want to partition this string into as many parts as possible so that each letter appears in at most one part.

- Difficulty: Medium

- Platform: LeetCode

21. Pairs:

- Problem Statement: Given an array of integers, find and print the number of pairs in which the difference between them is K.

- Difficulty: Easy

- Platform: HackerRank

22. Sherlock and Anagrams:

- Problem Statement: Given a string, find the number of pairs of substrings that are anagrams of each other.

- Difficulty: Medium

- Platform: HackerRank

23. Array Manipulation:

- Problem Statement: Starting with a 1-indexed array of zeros, perform a series of operations and return the maximum value in the array.

- Difficulty: Hard

- Platform: HackerRank

24. The Maximum Subarray:

- Problem Statement: Given an array of integers, find the contiguous subarray with the largest sum.

- Difficulty: Easy

- Platform: HackerRank

25. Counting Valleys:

- Problem Statement: Given a string representing a hiker's path, find and print the number of valleys walked through.

- Difficulty: Easy

- Platform: HackerRank

There is a drill in the army. The Army general wants to know the best cumulative power of his troops.

Troops give the best results when the maximum different level of a soldier stands together. If a troop

contains 2 same levels of a soldier their power becomes 0. Let assume there are x different levels in the

army, You have to find the power of the best troop from the army given. Assume 1 soldier power to be 1

unit.

1) Input: army = "wpwkewe" (w,p,k,e : are different levels of soldier) Output: 4 At max 4 is max power of

any troop formed. (pwke)