LEETCODE BOOTCAMP, QUESTION SET 1

ADVICE: PLEASE ATTEMPT EACH QUESTION YOURSELF ONCE, BEFORE LOOKING UP THE SOLUTION ONLINE. GIVE AT LEAST 15 minutes.

1. Given an array nums of n integers, are there elements a, b, c in *nums* such that a + b + c = 0? Find all unique triplets in the array which gives the sum of zero. Link: https://leetcode.com/problems/3sum/
2. Given a string, find the length of the longest substring without repeating characters. Link: https://leetcode.com/problems/longest-substring-without-repeating-characters/
3. Given a string S and a string T, find the minimum window in S which will contain all the characters in T in complexity O(n). Link: https://leetcode.com/problems/minimum-window-substring/
4. Given a collection of intervals, merge all overlapping intervals. Link: https://leetcode.com/problems/merge-intervals/
5. Given an array A of integers and integer K, return the maximum S such that there exists i < j with A[i] + A[j] = S and S < K. If no i, j exist satisfying this equation, return -1. Link: https://leetcode.com/problems/two-sum-less-than-k/
6. Given an array of integers A sorted in non-decreasing order, return an array of the squares of each number, also in sorted non-decreasing order. Link: https://leetcode.com/problems/squares-of-a-sorted-array/
7. Count the number of prime numbers less than a non-negative number, n. Link: https://leetcode.com/problems/count-primes/
8. We are given some website visits: the user with name username[i] visited the website website[i] at time timestamp[i]. A 3-sequence is a list of websites of length 3 sorted in ascending order by the time of their visits. (The websites in a 3-sequence are not necessarily distinct.) Link: https://leetcode.com/problems/analyze-user-website-visit-pattern/

9. Given a non-empty string s, you may delete at most one character. Judge whether you can make it a palindrome. Link: https://leetcode.com/problems/valid-palindrome-ii/
10. Given a string s, find the longest palindromic substring in s. You may assume that the maximum length of s is 1000. (Without Dynamic Programming) Link: https://leetcode.com/problems/longest-palindromic-substring/
11. Given an input string, reverse the string word by word. Link: https://leetcode.com/problems/reverse-words-in-a-string/
12. There are two sorted arrays nums1 and nums2 of size m and n respectively. Find the median of the two sorted arrays. The overall run time complexity should be O(log (m+n)). Link: https://leetcode.com/problems/median-of-two-sorted-arrays/
13. Implement int sqrt(int x). Link: https://leetcode.com/problems/sqrtx (Use Divide and Conquer Approach)
14. Given a stream of integers and a window size, calculate the moving average of all integers in the sliding window. Link: https://leetcode.com/problems/moving-average-from-data-stream/
15. Given a matrix of m x n elements (m rows, n columns), return all elements of the matrix in spiral order. Link: https://leetcode.com/problems/spiral-matrix/

ARTICLES:

1. HINT FOR QUES7: https://primes.utm.edu/glossary/page.php?sort=SieveOfEratosthenes
2. https://medium.com/@mera.stackhouse/which-sorting-algorithms-to-know-for-the-tech-interview-654a1f619e1d
3. TRIE - https://medium.com/basecs/trying-to-understand-tries-3ec6bede0014
4. https://www.geeksforgeeks.org/3-way-quicksort-dutch-national-flag/