Weekly assignments

Week-1

- Brush up the fundamentals of your favorite programming language
    - Logical operators
    - Conditional operators
    - Data types
    - Control statements (if..else etc.)
    - Native/Built-in Data structures (Array etc.)
    - Loop
- Watch this video: https://www.youtube.com/watch?v=w0NN-mJWowo
  And note down the key points which you think helped Sohag vai and his friends to be successful in life.
- Solve the following problems:
    - Write a code to find 'minimum' value from a list of n numbers, where 1 <= n <= 1000 and the numbers can be any integers.
      For example, if n=5 and the list is: 1, 6, 8, 10, 999
      The result should be: 1
    - Write a code find the 'longest string' from a list of strings.
      For example if the given strings are: 'I', 'love', 'my country', 'very', 'much'
      The result should be: 'my country'
    - Convert a positive decimal number to it's binary representation.
      For example, if the given decimal number is: 8
      The result should be: 1000
    - Given two numbers x and n, find the value of x^n (x to the power n)
    - Given a sentence, keep the order of the words same, but reverse the characters of each word.
      For example, if the given sentence is: 'I love programming'
      The result should be: 'I evol gnimmargorp'
    - https://www.hackerrank.com/challenges/handshake/problem?isFullScreen=true
    - https://leetcode.com/problems/palindrome-number/
    - https://www.interviewbit.com/problems/reverse-the-string/
    - https://leetcode.com/problems/two-sum/
    - https://leetcode.com/problems/contains-duplicate/
    - https://leetcode.com/problems/max-consecutive-ones/
    - https://www.interviewbit.com/problems/fizzbuzz/

Week-2

- https://www.hackerrank.com/challenges/counting-valleys/problem
- https://www.hackerrank.com/challenges/strange-advertising/problem
- https://leetcode.com/problems/two-sum-ii-input-array-is-sorted/
- https://leetcode.com/problems/first-unique-character-in-a-string/
- https://leetcode.com/problems/find-all-duplicates-in-an-array/
- https://leetcode.com/problems/valid-anagram/
- https://leetcode.com/problems/plus-one/
- https://leetcode.com/problems/valid-palindrome/
- https://www.hackerrank.com/challenges/arrays-ds/problem
- https://www.hackerrank.com/challenges/array-left-rotation/problem
- https://www.hackerrank.com/challenges/sock-merchant/problem
- https://www.hackerrank.com/challenges/drawing-book/problem

Week-3

- https://leetcode.com/problems/roman-to-integer/
- https://leetcode.com/problems/majority-element/
- https://leetcode.com/problems/contains-duplicate-ii/
- https://leetcode.com/problems/missing-number/
- https://leetcode.com/problems/happy-number/
- https://leetcode.com/problems/merge-similar-items/
- https://www.hackerrank.com/challenges/flipping-bits/problem
- https://www.hackerrank.com/challenges/mini-max-sum/problem
- https://www.hackerrank.com/challenges/time-conversion/problem
- https://www.hackerrank.com/challenges/countingsort1/problem?isFullScreen=true
- https://www.hackerrank.com/challenges/countingsort2/problem?isFullScreen=true
- https://www.hackerrank.com/challenges/find-the-median/problem?isFullScreen=true

Week-4

- https://www.hackerrank.com/challenges/staircase/problem?isFullScreen=true
- https://leetcode.com/problems/spiral-matrix/
- https://www.hackerrank.com/challenges/diagonal-difference/problem?isFullScreen=true
- https://www.hackerrank.com/challenges/insertionsort1/problem?isFullScreen=true
- https://www.hackerrank.com/challenges/insertionsort2/problem?isFullScreen=true
- https://www.hackerrank.com/challenges/2d-array/problem?isFullScreen=true
- https://www.hackerrank.com/challenges/dynamic-array/problem?isFullScreen=true
- https://leetcode.com/problems/remove-duplicates-from-sorted-array/
- https://leetcode.com/problems/pascals-triangle/
- https://leetcode.com/problems/pascals-triangle-ii/
- https://leetcode.com/problems/merge-sorted-array/
- https://leetcode.com/problems/third-maximum-number/
- https://leetcode.com/problems/move-zeroes/
- https://leetcode.com/problems/reshape-the-matrix/
- https://leetcode.com/problems/find-pivot-index/

Continue the problem-solving journey:

- https://www.hackerrank.com/challenges/sparse-arrays/problem
- https://www.hackerrank.com/challenges/jesse-and-cookies/problem
- https://www.hackerrank.com/challenges/castle-on-the-grid/problem
- https://www.hackerrank.com/challenges/plus-minus/problem
- https://www.hackerrank.com/challenges/kangaroo/problem
- https://www.hackerrank.com/challenges/grading/problem
- https://www.hackerrank.com/challenges/apple-and-orange/problem
- https://www.hackerrank.com/challenges/breaking-best-and-worst-records/problem
- https://www.hackerrank.com/challenges/divisible-sum-pairs/problem
- https://www.hackerrank.com/challenges/migratory-birds/problem
- https://www.hackerrank.com/challenges/day-of-the-programmer/problem
- https://www.hackerrank.com/challenges/bon-appetit/problem
- https://www.hackerrank.com/challenges/electronics-shop/problem
- https://www.hackerrank.com/challenges/angry-professor/problem
- https://www.hackerrank.com/challenges/beautiful-days-at-the-movies/problem

Along with these try to solve as many problems as you can from these two lists:

- https://www.hackerrank.com/domains/algorithms?filters%5Bsubdomains%5D%5B%5D=implementation&filters%5Bdifficulty%5D%5B%5D=easy
- https://leetcode.com/problemset/all/?difficulty=EASY