## 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: <a href="https://www.youtube.com/watch?v=w0NN-mJWowo">https://www.youtube.com/watch?v=w0NN-mJWowo</a>
  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 <=</li>
    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
- o <a href="https://leetcode.com/problems/palindrome-number/">https://leetcode.com/problems/palindrome-number/</a>
- https://www.interviewbit.com/problems/reverse-the-string/
- https://leetcode.com/problems/two-sum/
- o <a href="https://leetcode.com/problems/contains-duplicate/">https://leetcode.com/problems/contains-duplicate/</a>
- https://leetcode.com/problems/max-consecutive-ones/
- https://www.interviewbit.com/problems/fizzbuzz/

## Week-2

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