Assignment Lec (7)

(1) Write a C program to print the index of **FIRST** occurrence of a number in an array. Array index start from 0. If the item is not in the list print -1.

Example:

Array = {1,2,3,4,4,4}

The required number is 4 it should print 3

(2) Write a program that computes the nth term of the arithmetic series: 1, 3, 5, 7, 9, …

Run the program to compute the 100th term of the given series

(3) Write a program that computes the nth term of the geometric series: 1, 3, 9, 27, …

Run the program to compute the 10th term of the given series.

(4) The sequence of numbers 1, 1, 2, 3, 5, 8, 13, … is called Fibonacci numbers, each is the sum of the preceding 2.

Write a program which given n, returns the nth Fibonacci number.

- with for/while
- with recursion