

Algorithm WorkShop 1

- 1) Implement a Stack and a Queue of Positive values (Note: the implementation can be used with more than one Stack and/or Queue at the same time)
- 2) Implement a function that reverse a Stack
- 3) Implement a function that print the value of a specific location in the Queue
- 4) Implement a function that calculates the power of a number to a certain exponent using: Iterative, Recursion methods. Then Calculates their Complexity for both methods.
- 5) Implement a function that calculates the Fibonacci number to a certain exponent using: Iterative, Recursion methods. Then Calculates their Complexity for both methods.

$$\text{Fib}(n) = \text{Fib}(n-1) + \text{Fib}(n-2)$$

- 6) Implement a function that search for a number in a list of numbers, then calculates its complexity