❖Fibonacci:

Explanation: -

The Fibonacci sequence is a series of numbers where each number is the sum of the two preceding ones, starting with 0 and 1, resulting in the sequence: 0, 1, 1, 2, 3, 5, 8, and so on. It has various applications in mathematics, computer science, and nature, such as modelling population growth and branching patterns in trees. The n-th Fibonacci number can be computed using recursive or iterative methods, with the recursive method being less efficient due to its exponential time complexity.

```
Time Complexity: - O(2^n)
Space Complexity: - O(n)
[Start]
[Input n]
[Is n \le 1?]
[Yes]
          [No]
[Output n] [fibResult = fibonacci(n - 1) + fibonacci(n - 2)]
            [Start fibonacci]
[End]
              [Is n <= 1?]
                       [No]
           [Yes]
                       [Return fibonacci(n - 1) + fibonacci(n - 2)]
      [Return n]
            [Output "Fibonacci of " + n + " is: " + fibResult]
   [End]
                                   [End]
```