

Practical 2: Fibonacci Series Using SciLab

Aim:

To print the Fibonacci series till n using SciLab.

Materials Required:

- SciLab software (version 6.1 or higher)
- A computer system with SciLab installed

Theory (In Brief):

The Fibonacci series is a sequence of numbers where each number is the sum of the two preceding ones, starting from 0 and 1. This sequence is significant in mathematics and appears frequently in nature and computer science applications.

The Fibonacci sequence can be defined mathematically as follows: $F(0) = 0$, $F(1) = 1$, and $F(n) = F(n-1) + F(n-2)$ for $n > 1$. In SciLab, loops and conditional logic can be used to generate the Fibonacci series efficiently.

Formulas Required:

$$F(0) = 0, F(1) = 1$$

$$F(n) = F(n-1) + F(n-2) \text{ for } n > 1$$

Result:

The Fibonacci series up to the nth term was successfully generated using SciLab.