1. What is Fibonacci Series?

The Fibonacci series is an infinite series of numbers that starts with 0 and 1. Each number in the series is the sum of the two numbers that come before it.

For example, First number is 0 then second number is 1 then third number in the series is 1 because 0 + 1 = 1 and fourth number is 2 because 1 + 1 = 2.

The Fibonacci series continues with 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, and so on.

**Fibonacci Sequence Rule:**

**Xn = Xn−1 + Xn−2**

where:

Xn is term number "n"

Xn−1 is the previous term (n−1)

Xn−2 is the term before that (n−2)

2. What is Factorial?

In mathematics, a factorial is a function that multiplies a number by every number that precedes it. The factorial function is denoted by the symbol ‘!’.

For example, the factorial of 3 is 3! = 3 × 2 × 1, which is equal to 6.

The factorial of 4 is 4! = 4 × 3 × 2 × 1, which is equal to 24.

Factorial zero is defined as equal to 1.

**The formulas for n factorial are:**

* **n! = n(n-1)(n-2)…………………….(3)(2)(1)**
* **n! = n × (n - 1)!**