



Loops (For & While) (ASSIGNMENT –III):

1. Write a Program in Python to compute the Factorial of a Number.
2. Write a Program in Python to find the sum of the following series
 - (a) $S = 1 + 2 + 3 + 4 + \dots + N$ (Input N).
 - (b) $S = 1 + 3 + 5 + 7 + \dots + \text{Up to Nth Term}$ (Input N).
 - (c) $S = 1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \dots + \frac{1}{2^N}$ (Input N).
 - (d) $S = 1 - \frac{1}{3} + \frac{1}{9} - \frac{1}{27} + \frac{1}{81} - \frac{1}{243} \dots$ Up to Nth Term.
 - (e) $S = 1! + 2! + 3! + 4! + \dots + N!$ (Input N).
3. Write a Program in Python to Generate the Fibonacci Series up to Nth Term.
 $1 + 1 + 2 + 3 + 5 + 8 + 13 + \dots + \text{Nth Term}$
4. Write a Program in Python to Print the Reverse of a Number.
5. Write a Program in Python to find the Sum of the Digits of a Number.