SMT. CHANDABEN MOHANBHAI PATEL INSTITUTE OF COMPUTER APPLICATIONS
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY,
CHANGA – 388 421
Branch: B.C.A **Semester:** IV
Course Code: CAUC205
Course Name: Open Source Technologies
Component: Practical Assignment – 2
Topics Covered: Control and Looping Statements
Submission Date: 07/02/2026

WAP to print the following series and its sum for n terms. (Here n is user defined value)

(1) 1 + 4 – 9 + 16 – 25 + 36 – 49 ….

(2) 1! + 2! + 3! + 4! + 5! ….

(3) 1 – 1/4 + 1/9 – 1/16 + 1/25 ….

(4) 2, 6, 21, 88, 445 ….

(5) 3, 7, 27, 47, 83 ….

(6) x + x2 + x 3 + x 4 + x 5 …. (Here x is user defined value)

(7) x + x2 /2! + x3 /3! + x4 /4! + x5 /5! …. (Here x is user defined value)

(8) 1 – x + x2 /2! – x3 /3! + x4 /4! – x5 /5! …. (Here x is user defined value)

(9) Fibonacci series: 1 1 2 3 5 8 13 ….

(10) Lucca series: 0 1 1 2 3 5 8 ….

(11) WAP to print the sum of digits of given number. For ex. No=12345 => sum=15

(12) WAP to find out the total number of odd digits and even digits within the given no and also find out sum of them. For ex. No=23569 => odd=3, even=2, sum of odd=17, sum of even=8

(13) WAP to print the reverse no. of a given no. For ex. No=5623 => reverse=3265

(14) WAP to find out the sum of first and last digit of a given no. For ex. No=55899 => sum=14

(15) WAP to find out the smallest and largest digits in the given no. For ex. No=85924 => s=2, l=9

(16) WAP to check whether the number is prime or not?

(17) WAP to check whether the number is palindrome or not?

(18) WAP to check whether the number is armstrong or not?

(19) WAP to check whether the number is binary or not?

(20) WAP to check whether the number is octal or not?