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 – 3
Topics Covered: Arrays, User Defined Functions, Inbuilt Functions
Submission Date: 17/02/2026`

(1) WAP to create and display array with following elements

("Apple", "Banana", "Cherry", "Date")

(2) WAP to sort below array:

(45, 12, 78, 34, 89)

(3) WAP that demonstrates associative array.

(4) WAP to merge two arrays (Create dynamic program).

Array 1 : ("Red", "Blue", "Green")

Array 2 : ("Yellow", "Purple", "Orange")

(5) WAP to find given element from an array

Ex. ("Dog", "Cat", "Elephant", "Tiger") => find “Cat” in array.

(6) WAP to demonstrate multidimensional array.

(7) WAP to remove duplicate values from an array.

Array : (1, 2, 2, 3, 4, 4, 5)

(8) WAP to find sum of array elements.

Array : (10, 20, 30, 40)

(9) WAP which demonstrates all types of functions.

(10) WAP which creates the following built-in functions which takes the required values and returns proper outputs. (Try to create all functions of different types)

(1) sum() (2) pow() (3) prime()

(4) max() (5) min() (6) factors()

(7) factorial() (8) space() (9) sort_array()

(10) series()

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(11) Write a program which having the following functions for conversions of number systems.

(1) Dectobin (for Decimal To Binary Conversion)

(2) Dectooct (for Decimal To Octal Conversion)

(3) Dectohexa (for Decimal To Hexadecimal Conversion)

(4) Bintodec (for Binary To Decimal Conversion)

(5) Bintooct (for Binary To Octal Conversion)

(6) Bintohexa (for Binary To Hexadecimal Conversion)

(7) Octtodec (for Octal To Decimal Conversion)

(8) Octtobin (for Octal To Binary Conversion)

(9) Octtohexa (for Octal To Hexadecimal Conversion)

(10) Hexatodec (for Hexadecimal To Decimal Conversion)

(11) Hexatobin (for Hexadecimal To Binary Conversion)

(12) Hexatooct (for Hexadecimal To Octal Conversion)

(12) WAP which having the recursive function to calculate the factorial of the given number.

(13) WAP which having recursive function to print the table for the given number.

(14) WAP to find out the maximum and minimum elements from an array.

(15) WAP to find no. of odd and even elements from an array.

(16) WAP to sort array in ascending and descending order.

(17) WAP to find out the difference in days between any two dates.

(18) WAP which sorts two different arrays first and then merge them into third array. (Resulting (Merged) array also will be sorted array).

(19) WAP to count no. of positive, negative and zero elements from an array.

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(20) Write a menu driven program which insert, delete, update and search an element from an array.

(21) WAP to swap even positional elements with odd positional elements of an array.

(22) WAP to remove duplicate elements from an array. (Without using second array).

(23) WAP to read a sequence of elements and finds its first, second and third differences.

For ex. A[10]={1,2,5,8,10,15,25,35,50,100}

D1={1,3,3,2,5,10,10,15,50}

D2={2,0,-1,3,5,0,5,35}

D3={-2,-1,4,2,-5,5,30}