Program 6: WAP to find sum of series
\[1^2 + 2^3 + 3^4 + \ldots + n^{n+1}\]

Program 7: WAP to find sum of series
\[1^2 - 2^3 + 3^4 - 4^5 + \ldots + n^{n+1}\]

Program 8: WAP to find sum of all the digits of number and number can be of any length.

**1 Dimensional array**

Program 1: WAP to store integer data in an array, and print the elements of the array.

Program 2: WAP to find the sum of all elements of an array.

Program 3: WAP to find the average of all elements of an array.

Program 4: WAP to find the greatest/maximum number in the array.

Program 5: WAP to find the smallest/minimum number in the array.

Program 6: WAP to search a given element in an array using linear search.

Program 7: WAP to search a given element in an array using binary search.

Program 8: WAP to sort the elements of array using bubble sort.

Program 9: WAP to search a given item in an array.

Program 10: WAP to display the contents of the elements of array that are at odd/even positions.

Program 11: WAP to enter 10 different numbers in an array, then adding the numbers that are divisible by 3 and displaying the result.

Program 12: WAP to store elements in array, insert a new element in array by asking user to enter location and number to be inserted. Display contents of array after insertion.

Program 13: WAP to delete any element in array and display content of array after deletion.

Program 14: WAP to create an array for storing the marks of 60 students and find
- (a) Highest marks.
- (b) Lowest marks.
- (c) Average marks.
- (d) Count how many students failed (marks < 30).

Program 15: WAP to create 2 arrays of 1D. Enter data in them. Create third array and add the contents of 1st and 2nd array and store answer in 3rd array.

**2 Dimensional array**

Program 1: WAP to add two matrices.

Program 2: WAP to multiply two matrices.

Program 3: WAP to find the sum of diagonal elements of a square matrix.

Program 4: WAP to find the sum of opposite diagonal elements of a square matrix.

Program 5: WAP to find transpose of a matrix.

Program 6: WAP to enter 3X3 array. Display the array in the form of a matrix.

**String**

Program 1: WAP to concatenate two strings.

Program 2: WAP to compare two strings.