

CSA02 C Programming -Cycle-1

1. Write a program to print the below pattern.

Sample Input:

Number of line: 4

Sample output:

```
1
2 2
3 3 3
4 4 4 4
```

2. Write a program to print the number of negative numbers in an array of numbers

Sample Input;

Array of elements = { 16, -18, 27, -16, 23, -21, 19 }

Sample Output:

Number of negative numbers in Array elements = 3

3. Write a program in C to add two numbers using pointers.

Test Data :

Input the first number : 5

Input the second number : 6

Expected Output :

The sum of the entered numbers is : 11

4. Write a program in C to Calculate the length of the string using a pointer

Test Data :

Input a string : SAVEETHA

Expected Output :

The length of the given string saveethais : 8

5. A year has 365 days but leap year consists of 366 days. This one day is added in the month of February. This month which generally has 28 days and also known as the shortest month in a year would get added with an extra day, which gives us a total of 29 days in that month. It is based on the Georgian calendar. Compile and Execute the C program for checking out whether a given year is a leap year or not.

Sample Input:

Enter Date : 04/11/1947

Sample Output:

Given year is Non Leap Year

6. Write a Program to find the Maximum and Minimum value in a given array of numbers.

Sample Input:

Enter no. of elements in an array 5

Enter the elements:

1 2 3 4 5

Output:

Maximum of an array 5

Minimum of an array 1

7. Write a Program to find the sum and average of numbers in a matrix format of array

Sample input:

1 2 3

4 5 6

7 8 9

Output:

Sum = 45

Average = 5

8. Write a program in C to swap elements using call by reference.

Test Data :

Input the value of 1st element : 5

Input the value of 2nd element : 6

Input the value of 3rd element : 7

Expected Output :

The value before swapping are :

element 1 = 5

element 2 = 6

element 3 = 7

The value after swapping are :

element 1 = 7

element 2 = 5

element 3 = 6