**Programming Fundamentals**

**Lab Manual**

**Lab 02**

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**Topic : Arrays & Strings**

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**Task 1**

Write a C++ program that takes an input from user and store them in an array.

**Sample Output:**

**Enter 5 numbers: 1 2 3 4 5  
The numbers are: 1 2 3 4 5**

**Task 2**

Write a C++ program that takes number of elements from user and find the total number of positive integers in an array.

**Sample Output:**

**Enter elements in an array: 0 -1 2  
Positive numbers are= 1**

**Task 3**

Write a C++ program that takes number of elements from user and find the maximum number in an integer array.  
  
**Sample Output:**

**Enter numbers in an array: 10 5 12  
Max number is: 12**

**Task 4**

Write a C++ program that takes number of elements from user and find the second maximum number in an integer array.  
  
**Sample Output:**

**Enter numbers in an array: 10 5 12  
2nd max number is: 10**

**Task 5**

Write a C++ program that takes number of elements from user in two different arrays and merge the data of both arrays in third array.  
  
**Sample Output:**

**Enter elements of 1st array: 4 6 2  
Enter elements of 2nd array: 9 7 8  
New Array (Merged): 4 6 2 9 7 8**

**Task 6**

Write a C++ program that takes input in an array from user and add all the positive numbers and negative numbers separately. Also show the total sum of both positive and negative numbers.  
  
**Sample Output:**

**Enter elements of an array: 2 -2 4 6  
Positive numbers sum: 6  
Negative numbers sum: - 8  
Total sum: - 2**

**Task 7**

Write a C++ program that takes an input string from user and find the length of that string.  
  
**Sample Output:**

**Input a string without spaces: thisispflab**

**The string contains 11 number of characters.**

**So, the length of the string thisispflab is: 11**

**Task 8**

Write a C++ program that takes an input string from user and you have to reverse that string.  
  
**Sample Output:**

**Enter a string without spaces: staysafe**

**After reverse string: efasyats**