

North South University
CSE115, Summer 2021
Assignment 2, Due: 24th August, 2021

Array

1) Write a C program to accept N numbers in an array and arrange them in an ascending order.

2) Take inputs (**single digit integer**) of an int array of size 5 and combine all the elements into a positive whole number.

Enter values: **5 4 8 0 1**

Combined integer number: **54801**

3) Write a program in C to count a total number of duplicate elements in an array.

Test Data:

Input the number of elements to be stored in the array :3

Input 3 elements in the array:

element – 0 : 5

element – 1 : 1

element – 2 : 1

Expected Output: Total number of duplicate elements found in the array is: 1

4) Write a program in C to delete an element at desired position of an array.

Test Data: Input the size of array: 5

Input 5 elements in the array in ascending order:

element – 0 : 1

element – 1 : 2

element – 2 : 3

element – 3 : 4

element – 4 : 5

Input the position where to delete: 3

Expected Output: The new list is: 1 2 4 5

5) Write a program in C to insert an element at desired position of an array (considering that the last array element is empty).

Test Data: Input the size of array: 5

Input 4 elements in the array in ascending order:

element – 0 : 1

element – 1 : 2

element – 2 : 4

element – 3 : 5

Input the position where to insert: 2

Input the number to insert: 3

Expected Output: The new list is: 1 2 3 4 5

String:

1)Write a program in C to separate the individual characters from a string.

Test Data

Input the string: IloveCSE115.

Expected Output: I l o v e C S E 1 1 5 .

2)Write a program in C to find the number of times a given word “the ” appears in the given string.

Test Data:

Input the string: The string where the word the is present more than once.

Expected Output: The frequency of the word “the ” is: 3

3)Write a function that shows the number of vowels and consonants in a string.

void count (char arr[]);

4)Implement the following function which replaces all the occurrences of one character with another character in a string and shows the modified string.

void Replace (char arr[],char oldChar, char newChar);

The Replace function replaces all the occurrences of oldChar with newChar in the string arr.

5)Write a program in C to remove all characters in String Except Alphabets.

Test Data:

Input the string: coronaupdate2news.co3m

Expected Output: After removing the Output String: coronaupdatenewscom

Two-Dimensional Array:

1) Take input of a 3x3 matrix and display the sum of its main diagonal and right diagonal elements. For the following matrix, your program should display 12 and 10. (Because $5+3+4 = 12$ and $1+3+6=10$)

5	2	1
0	3	7
6	8	4

Best of Luck