NATIONAL UNIVERSITY OF COMPUTER AND EMERGING SCIENCES

ISLAMABAD

OBJECT ORIENTED PROGRAMMING LAB SPRING 2020

Week- 02

Problem 1:

Take an array of length n where all the numbers are nonnegative and unique. Find the element in the array possessing the highest value. Split the element into two parts where first part contains the **second highest** value in the array and second part hold the required additive entity to get the highest value (create another array of size+1 and save the all values in Array_B). Return the array index value. Consider the negative numbers as well.

Input: 4 8 6 3 2

Output: 4 6 2 6 3 2

Note: use index number to return a value from an array

Problem 2:

Write a sum() function that is used to find the sum of the array through pointers. In this program we make use of * operator. The * (asterisk) operator denotes the value of variable.

Input: array = 2, 4, -6, 5, 8, -1

Output: sum = 12

Problem 3:

Write a bool function named find that takes a pointer to the beginning and an integer pointer to the *end (end=end+size) of an array, as well as a value. The function should search for the given value and return a true if an element was found, or false if no element was found.

Problem 4:

Write a c++ program to accept five integer value from the keyword. These five values are store in an array using pointer. Then print all the elements of an array in reverse order. Note: use index number to return a value from an array

Problem 5:

Write a function myStrLen(char*) which returns the length of the entered string. Write the function without using the C++ function **strlen**.

Summary:

This lab session introduces the concepts of Pointers and DMA in C++. How to Declaring pointer arrays, pointer arithmetic, Multidimensional Pointers, Char* pointers, Alias to pointers

Submission Instructions:

1. Save all .cpp files with your roll no and task number e.g. i19XXXX_Task01.cpp
2. Now create a new folder with name ROLLNO_LAB02e.g. i19XXXX_LAB02
3. Move all of your.cpp files to this newly created directory and compress it into .zip file.
4. Now you have to submit this zipped file on Slate/googleclassroom