

**Department of Electrical and Computer Engineering Pak-Austria Fachhochschule: Institute of Applied Sciences and Technology, Haripur, Pakistan**

**COMP112L Time: 1.5 hrs. Marks: 10**

**Instructor: Engr. Rafi Ullah Dated:2nd Nov, 2021**

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**Lab # 02**

**Task 1:**

Write a C++ program to find to add two number using function pointers. Define the function Adder which return the sum of the numbers.

**Solution:**

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| **CODE**  **#include<iostream>**  **using namespace std;**  **int adder(int \*a, int \*b);**  **int main()**  **{**  **int a, b, x;**  **cout<<"Enter value in a : ";**  **cin>>a;**  **cout<<"Enter value in b : ";**  **cin>>b;**  **x = adder(&a, &b);**    **cout<<"Sum of two number is : "<<x<<endl;**  **return 0;**  **}**  **int adder(int\*x, int\*y)**  **{**  **return (\*x + \*y);**  **}**  **OUTPUT** |

**Task # 02:**

Write a C++ program which sorts an array of numbers in ascending order. You can take the array from the user or initialize it on compile time in the program. Use a Function Pointers concept to sort the given array.

**Solution:**

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| **CODE**  **#include<iostream>**  **using namespace std;**  **void sort(int\* arr, int size);**  **int main()**  **{**  **int size;**  **cout<<"Enter the size of array : ";**  **cin>>size;**  **cout<<endl;**  **int arr[size];**  **for(int i=0; i<size; i++)**  **{**  **cout<<"Enter the value at index "<<i<<":";**  **cin>>arr[i];**  **}**    **sort(arr, size);**  **for(int i=0; i<size; i++)**  **{**  **cout<<arr[i]<<" ";**  **}**  **return 0;**  **}**  **void sort(int\* arr, int size)**  **{**  **for(int i=0; i<size; i++)**  **{**  **for(int j=0; j<size; j++)**  **{**  **if(\*(arr+i)<\*(arr+j))**  **{**  **int temp = \*(arr+i);**  **\*(arr+i)= \*(arr+j);**  **\*(arr+j)=temp;**  **}**    **}**    **}**  **}**  **OUTPUT** |