

# Lab 14: C++ pointers

## Objective

This lab is to introduce you to pointers in C++.

## Assignment

Write a Cpp program that will merge two arrays in ascending order and print the final array. Here, assume that the 1<sup>st</sup> input array is sorted in ascending order and the 2<sup>nd</sup> input array is sorted in descending order.

## Details and requirements

Make use of pointers to access elements in your code. Even when comparing two array elements, use pointers.

## Sample output:

Enter 1<sup>st</sup> array: 1 3 5 7 9

Enter 2<sup>nd</sup> array: 10 8 6 4 2

After merging the two arrays, the final array is: 1 2 3 4 5 6 7 8 9 10

## Hint

To access elements of an array using pointers

```
int a[]={1,2,3};  
int *a_ptr=&a[0];
```

```
cout<<*a_ptr → gives 1  
cout<<*(a_ptr+1) → gives 2
```