

# Lab 04 - Sorting & Nodes Problems

**Direction:** Submit typed work in the Labs directory of your github repositor or dropbox, or upload to the google classroom assignment. Each part should be a separate files. The files named should be "lab4A.txt" and "lab4B.cpp" respectively.

## Part A: In class

Your objective is to write an array trace table of the array below for one of the three sorting methods (bubble sort, insertion sort or selection sort) discussed in the sorting lecture. The table should illustrate the swaps that will occur to the array when it is the argument for the sorting method. Make sure to indicate which method the table is implementing.

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| 6 | 9 | 5 | 1 | 8 | 7 | 3 | 2 | 4 |
|---|---|---|---|---|---|---|---|---|

## Part B: Take home

Your objective is to write the definition of the function `Similar()` whose header is

```
template <typename T>
bool Similar(Node<T>* ar1, Node<T>* ar2)
```

It returns true if the nodes of *ar1* and *ar2* in the same position have the same values, but *ar1* and *ar2* are not necessarily the same length; otherwise, it returns false.