Assignment 4.2	
Bubble Sort	
Course Code: CPE007	**Program:** Computer Engineering
Course Title: Programming Logic and Design	**Date Performed: September 10, 2025**
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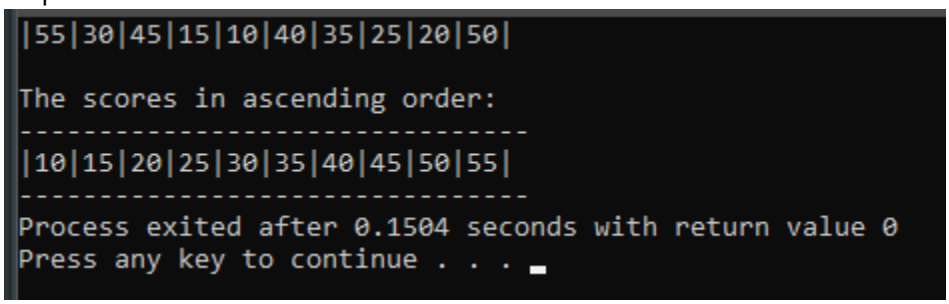
6. Output

```
#include <iostream>
using namespace std;

int main (){
   int scores[10] = {55,30,45,15,10,40,35,25,20,50};
   int n = 10;
        int temp, j, i;

        // Print Array
        cout << "|" ;
        for (n = 0; n < 10; n++){
                cout << scores[n] << "|";
        }

        //Sorting

        for(i = 0; i < n - 1; i++){
                for(j = 0; j < n - i - 1; j++){
                        if(scores[j] > scores[j + 1]){
                temp = scores[j];
                scores[j] = scores[j + 1];
                scores[j + 1] = temp;
                        }
                }
        }

        cout << endl;
        cout << endl;
        cout << "The scores in ascending order:" << endl;
        cout << "-------------------------------" << endl;

        // Print Sorted Array
        cout << "|" ;
        for (n = 0; n < 10; n++){
                cout << scores[n] << "|" ;
        }

        return 0;
}
```

Output:



Bubble sort works by going through the entire list of elements, comparing each of them, and then swapping them if the numbers are in the wrong order. It passes around the array comparing each element to one another and swapping each element if it is unsorted, eventually reaching the end of the list. After one full pass it moves on to the next element and repeats the process until all elements are properly sorted.

7. Supplementary Activity

8. Conclusion

In this assignment I learned how to sort arrays using bubble sort algorithm and fix an error I had in the f2f seatwork that was sorting the numbers wrong.

9. Assessment Rubric