Assignment 4.2	
Bubble Sort	
Course Code: CPE007	**Program:** Computer Engineering
Course Title: Programming Logic and Design	**Date Performed:9/10/25**
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6. Output

```cpp
#include <iostream>

int main(){
    int n = 15;
    int array[n] = {1,3,2,14,19,10,13,24,20,30,33,32,36,30,27};
    for (int b = 0; b < n-1;b++){
        for(int i = 0; i < n-1; i++){
            if (array[i] > array[i+1]){
                int temp = array[i];
                array[i] = array[i+1];
                array[i+1] = temp;
            }
        }
    }

    std::cout << "Array: ";

    for (int p = 0; p < n;p++){
        std::cout << array[p] << " ";

    }
    return 0;
}
```

```
C:\Users\Admin\Downloads\s
Array: 1 2 3 10 13 14 19 20 24 27 30 30 32 33 36
--------------------------------
Process exited after 0.4132 seconds with return value 0
Press any key to continue . . .
```

From what I understand, Bubble sort works by comparing 2 different data and swapping them in ascending or descending order based on how the user wants it. This is done on a loop so that all data inside the array are checked. However, it also needs to be done on several passes so that the data are arranged correctly.

7. Supplementary Activity

8. Conclusion

This activity helped me understand more how bubble sorting works. I challenged myself by describing how bubble sorting works without using outside sources. I also coded the bubble sort code above based on how it works based on how I described it. By doing this activity, I learned more about how to make a sorting code that utilizes bubble sorting.

9. Assessment Rubric