

## Seatwork 4.1

### Arrays

<b>Course Code:</b> CPE007	<b>Program:</b> Computer Engineering
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### 6. Output

#### 1. Screenshot of the code

```
#include <iostream>

int main(){
    //declaration
    int grades[10] = {80,82,84,83,81,88,98,95,91,89};

    //print element
    std::cout << "Index 5 data is " << grades[4] << std::endl;

    //Change value
    grades[0] = 99;

    std::cout << "New Value of first element is now " << grades[0] << std::endl;
    //printing whole array
    for (int i = 0; i < 10;i++){
        std::cout << grades[i] << " ";
    }

    std::cout << std::endl << "Swapping" << std::endl;
    //Swapping variables
    int var1 = 10;
    int var2 = 20;

    int tempVar = var1;
    var1 = var2;
    var2 = tempVar;

    //swapping vars in an array
    int temp = grades[0];
    grades[0] = grades[9];
    grades[9] = temp;

    for (int i = 0; i < 10;i++){
        std::cout << grades[i] << " ";
    }

    return 0;
}
```

## 2.output

```
C:\Users\TIPQC\Documents\c + v
Index 5 data is 81
New Value of first element is now 99
99 82 84 83 81 88 98 95 91 89
Swapping
89 82 84 83 81 88 98 95 91 99
-----
Process exited after 0.01762 seconds with return value 0
Press any key to continue . . . |
```

## 7. Supplementary Activity

## 8. Conclusion

What I learned today is what arrays are and how they work. I learned what they are made of which consists of an element type, array name, and array size. I also learn more about how “for” loops work and how useful they can be with arrays because it loops in each data of the array. I also learned how you can swap variables inside and outside an array by using a temporary variable. Lastly, I also learned how to sort data inside an array using bubble sort which is comparing each data one by one and sorting them accordingly.

## 9. Assessment Rubric