

## Practice Exercise 1 – Array Duplicates

For this exercise you will work on the partially-implemented project **array\_duplicates**. The project contains a **main** function that already creates arrays to test, and a function **testArrays** that calls the appropriate functions to test the arrays. **Do NOT modify the code already provided**. Your job is to implement the following functions (this needs to be coded *all in one file*, the **Main.cpp** file):

- **deleteDuplicates( )**
  - Deletes all duplicates in the array.
  - **Parameters:** an array and the number of elements in the array.
  - You will need to shift the rest of the elements after deleting an element.
- **printArray()**
  - Prints the array elements on one line.
  - **Parameters:** an array and the number of elements in the array.

### Make sure you:

- Add a **name header** with your name, date, etc.
- Pass by **reference** when needed and you add the **const** modifier to the parameters **ONLY when necessary**.
- Do **NOT** use a **return** statement without returning anything! → **return;**
- Do **NOT** use the **break** and **continue** statements (there are no switch statements to use **break**).
- Do **NOT** use global variables **ever**.
- Do **NOT** modify any code given.

### Keep in mind the following:

- Divide your code in meaningful blocks for readability
- Name your variables using descriptive names
- Use all appropriate conventions for naming
- Do not leave unnecessary spaces or lines in your code

### Expected Output:

(see next page)

```
Array 1: Array is empty.  
Array 2: 1  
Deleting duplicates... 1  
Array 3: 1 1  
Deleting duplicates... 1  
Array 4: 1 1 2  
Deleting duplicates... 1 2  
Array 5: 1 2 1  
Deleting duplicates... 1 2  
Array 6: 1 2 2  
Deleting duplicates... 1 2  
Array 7: 1 1 1 2 1  
Deleting duplicates... 1 2  
Array 8: 1 2 2 1 2 2 2  
Deleting duplicates... 1 2  
Array 9: 2 3 5 1 2 3 5 2 4 5 6 7 3 2 5 7 3 7 4 6  
Deleting duplicates... 2 3 5 1 4 6 7  
Press any key to continue . . .
```