Lab 4 - section F

Objectives:

In this lab, you need to modify your functions (createArray, getArraySize, and freeArray) based your pre-lab.

In createArray function, an integer array needs to be created with its size and the maximum value in this array stored in front as two integers. After creating the array, your array should look like this:

size	max	Array[0]	Array[1]	...	Array[n-1]

You also need to modify the other two functions accordingly.

Main program steps:

1. Create an array like mentioned above with 10 random integer numbers.
2. Obtain the size of the array using your “getArraySize” function.
3. Print out all the numbers in your array, the size of the array, and the maximum value in this array.
4. Free the created array using your “freeArray” function.

Example output:

Elements in array are: 8, 1, 6, 2, 1, 1, 3, 8, 9, 6,

Array size is 10, and the maximum value in array is 9

Grading Criteria:

Main program: 5 points

createArray function: 15 points

getArraySize function: 5 points

freeArray function: 5 points

Note:

To compile strictly with C flags, please follow the following instruction when you create your project in VS:

VS -> new project -> empty project -> source files -> Add -> Add new item -> Source.c

Please make sure that your source file is in “.c” extension, NOT “.cpp” extension.

General note:

1. If your code does not compile, you will receive an automatic 0 for this assignment.
2. Changing the given function prototype will lead to an automatic zero grade.
3. Using any global variables will lead to an automatic zero grade.
4. The implementation of the function should include comments describing what it is intended to do and how this function should be called. Example can be found in CS 2050 lab policy.
5. If your submission does not include a source file, you will receive an automatic zero grade.