PRG355 **LAB #3**

Marks: 2% Due: Next lab class

Function Templates and Dynamic Arrays

Design **three function templates** as follows:

- **First function template** will be used to **sort arrays** of different data types in the ascending order. This function template is required to have the following two parameters: an array of a generic type (i.e., can be substituted by any type), and an integer representing the size of the array.

- **Second function template** will be used to **reverse an array** of any type (i.e., the first value becomes the last value, the second value becomes the second to the last value, and so forth). Please note that this is not sorting in the descending order. This function template is required to have the following two parameters: an array of a generic type, and an integer representing the size of the array.

- **Third function template** will be used to **display an array**. This function template is required to have two parameters: an array of a generic type, and an integer representing the size of the array.

Design the main program that can be used to test / use all of the three function templates above. The program should create at least **two dynamic arrays** of two different data types (i.e., char, int, float, double etc.) of your choice. The values stored in these arrays should be either created and assigned by the program, or entered by the user. The program will display both arrays after sorting and reversing. Please note that both dynamic arrays have to be deleted before the program ends.

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