## **PROBLEM STATEMENT:**

Create a program, using the bubble sort algorithm, to sort an array of integers

## CODE:

Must use only the bubble sort provided in class. The bubble sort is to have the following prototype

void bubbleSort( int dataArray[], const int size, int& numOfSwaps )

Modify it to stop as soon as the array is sorted.

The array is sorted if there are no swaps on a pass through an array

Prompt user for the fully qualified name of the file A sample file is enclosed ( see nums.txt )

The array to be sorted contains 500 integers.

The sorted array must be printed to a file, user chooses name, with a single integer on each line The last line of the output file must contain the number of times integer values were swapped open any file requested use functions.

## **DELIVERABLES**:

Source file and executable in a zip file named

cs121 lab8 YOURLASTNAME.zip

submitted to BrightSpace to Lab8

The electronic submission is due at 1:00pm 7 November 2023

Copy of source code 1:00pm 7 November 2023