Assignment Objective: Build skills on C class creation and integration by adding three quadratic sort algorithms to the list class from the List Assignment**.**

Requirements:

* Add the following public member functions to the list class. For the list.cpp file, add all these functions, in order, to the bottom of the list.cpp file.
  + void bubbleSort()
  + void selectionSort()
  + void insertionSort()

Each implementing the associated sorting algorithm AS DISCUSSED IN CLASS.

* + bool isSorted() const, that returns true if the list is sorted in ascending order; otherwise, it returns false. If it fails, it also prints the index where the failure occurs; the index where a[index] > a[index+1].
* Deliverables:
* Demonstrate that Quad Sorting works with the quadSortMain.cpp and a suitable Makefile, with the final build being known ad quadSort:
  + Run your program as follows:

make

./quadSort 20 > quadSortOutput.txt

./quadSort 20000 >> quadSortOutput.txt

* + Compare your quadSortOutput.txt to the posted quadSortCorrectOutput.txt file
  + Into D2L, put a zip file containing the files: list.h, list.cpp, Makefile and quadSortOutput.txt.
  + Turned into class, a hardcopy of your list.h, list.cpp, and quadSortOutput.txt files, in that order.