CS 272 - Fall 2017
Homework 4
Due: Wednesday, October 25

Do the following questions from the Self-Tests in Chapter 20 (page 215) of the book. Submit your answers on paper in class.

1) Suppose you have a C++ class that (among other things) requires that you store a private array of data points, each of which represent a voltage measurement at a particular time. Each data point must contain a `double` for voltage measurement and a `double` for the time measurement. For example, the first array element may have the value 1.52 and 0.100 and that data point represents 1.52V at 0.100 seconds. Assume that the number data points is not known until an object of the class is created (i.e. the number of array elements is passed in as int arguments to the constructor). This means that you must allocate the array dynamically.

   Write the C++ class declaration, the constructor and the destructor. You do not need to write any accessor functions. You do not need to initialize the elements of the array, you only need to ensure that the memory for the array is properly allocated in the constructor and deallocated in the destructor. You can hand-write your solution.

2) Chapter 20 Self-Test, question 7.
3) Chapter 20 Self-Test, question 8.
4) Chapter 20 Self-Test question 9.