**Junior Knights - Course 2 Week 1 Assignment: Sorting!!!**

In class you were taught how to perform a Bubble Sort and a Selection Sort. In addition, you were given code for a Bubble Sort. For this assignment, you add to this code sample by writing your own Selection Sort. Here is the function prototype to use:

void selectionSort(int array[], int length);

Make sure you test this and the bubbleSort on **unsorted** input arrays!!!

After you are done debugging it and have verified that it works, you'll run it on arrays of the following sizes:

10000, 20000, 50000, 80000, and 100000.

Chart how many seconds each of these takes to run on BOTH the Bubble Sort and the Selection Sort. Based on your chart, can you make a guess as to how long each would take on an array of size 200000? Is there a general pattern between the input size of the array and how long the each of these sorts takes to run? Which sort is faster? Is it significantly faster?

Feel free to test your program on arrays of other sizes to help you answer these questions.

**When you finish, email your assignment to Alan Wright at alanwright47@gmail.com.**

**Here is what you should email him:**

**a) Your code**

**b) A .doc or .docx file with a chart of all of the run-times for both algorithms, as well as text answering the questions posed.**