**Object-Oriented Programming II Fall 2016**

**CIS 9310**

**Programming Assignment 5**

For this assignment you are to modify the **Length** class implemented in Programming Assignment 3 by replacing the member functions *EqualTo()*, *LessThan()*, *GreaterThan()* and *Add()*with overloaded versions of the operators *==*, *<*, *>*, *+*, respectively, where each operator has the same semantics as the corresponding member function that it is replacing

In addition, the **Length** class member functions *Read()* and *Write()* should be replaced by overloaded versions of the operators *>>* and *<<*, respectively. Both of these operators should be declared as *friends* to the **Length** class and have semantics that conforms with how these operators are generally used for the inputting and outputting of data values. For example, given two **Length** class objects *len1* and *len2*, the statements

*cin >> len1 >> len2;*

*cout << len1 << len2;*

should be valid.

Once you have completed the implementation of the **Length** class, you are to use this class to implement an application that reads a sequence of up to 100 length values from a user, and then outputs the values in ascending order.

To read the values from the user, the program should repeatedly ask the user if there is a value to be input. Each time the user answers in the affirmative by entering the value “yes” (case should be ignored), the program should then prompt the user to enter a value. To indicate that there are no additional values to be processed, the user should enter the value “no” (case should be ignored). A value other than “yes” and “no” to the prompt for additional data should be ignored, and cause a re-prompting of the question.

After all of the values that are to be processed have been input, they should be sorted in ascending order, and output one per line.

**Due Data:** December 15, 2016