**CSC 1302: PRINCIPLES OF COMPUTER SCIENCE II**

**Lab 10**

**How to Submit**

Please submit your answers to the iCollege ‘assignment’ dropbox for your lab, once you have completed. Failure to submit within your given time period will result in a **ZERO FOR THIS LAB. NO EXCEPTIONS**.

1. Write a client program ***ClientSearching*** and in the ***main*** method:
   1. Call a method, *SequenSearch()* that performs sequential search. The method accepts two parameters: an array of integers (any order) and one integer. It returns the index of the one integer in the array if it is found, otherwise it returns -1. Print the original array, one integer being searched, and returned index in the ***main*** method.
   2. Call another method, *BinarySearch()* that takes two parameters: an array of **sorted** integers and one integer. The call should perform binary search and return the index of the integer in the array if found, otherwise return -1. Print the original array, one integer being searched, and returned index in the ***main*** method.
   3. Call a third method, *BinarySearchRecur()* that performs binary search recursively. It should take 4 parameters: a sorted array of integers, start position (index) and end position(index) of the array, and the integer value to find. It should return the index of the element if found, if not then it should return -1. Print the original array, one integer being searched, and returned index in the ***main*** method.