

# CSCI 2500 TEST 3 STUDY GUIDE FALL 2009

## Chapter 7: Arrays

- Write the Visual Basic statements to do the following:
  - Declare x as an array of Doubles of size 10.
  - Declare y as an array of integers with initial values 10, 20, 30, 40, 50.
  - Find the largest subscript for the one-dimensional array y and assign it to a variable called size.
  - Given the declarations from assignment 4  

```
Dim ageGroup(2) As String  
Dim numMales(2), numFemales(2) As Double
```

Write the code to input the values in the file POPULATION.TXT into these arrays as you did in Assignment 4.
  - Declare a structure called **College** with members **name** (string), **state** (string), and **yearFounded** (integer).
  - Write a single statement to sort the array x.
  - Declare an array rm of Double with 5 rows and 6 columns (assume rm(0,0) is used).
- Explain how to do a bubble sort. Given the numbers below, sort them using a bubble sort. Every time two numbers are swapped, rewrite **all** of the numbers.

x[0] =	9											
x[1] =	5											
x[2] =	7											
x[3] =	2											
x[4] =	3											

- Explain how to do a shell sort. Given the numbers below, sort them using a shell sort. Every time two numbers are swapped, rewrite **all** of the numbers.

x[0] =	9											
x[1] =	5											
x[2] =	7											
x[3] =	2											
x[4] =	3											

## Chapter 8: Sequential Files

- Write the Visual Basic statements to do the following:
  - Open the file called LC.TXT for **output**.
  - Open the file called LC.TXT for **input**.
  - Write the contents of the textbox called txtName to the file opened in part (a) above.
  - Close the file opened in part (a) above.
  - Open the file called LC.TXT for **append**.
  - Check to see if LC.TXT exists.
- Explain how to edit or delete a record from a sequential file.
- Write the exception-handling code so that if someone enters an invalid integer for n in an InputBox labeled "How many dependents?", a message box pops up with an error message and assigns 0 to the value, then computes taxCredit=1000\*n.