CIS 1400: Programming and Logic Technique
Lab Assignment

Name: _____

Lab Assignment	#9 – Algorithms
Due Date *(beginning of class)*	11/12/2012
Points	Multiple Choice _____/ 10 pts. Search of Sorted Names (*attach hardcopies*) Flowchart _____/ 25 pts. VB Program _____/ 15 pts. **Total** _____**/ 50 pts.**

Lab Assignment #9 Activities

1. Answer the following **Chapter 9 Multiple Choice Review Questions** on pages 353 to 355 of your textbook. *(5 points)*

Question Number	Your Answer
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

2. Design a program to solve **Chapter 9 Programming Exercise 2 (Sorted Names)** combined with **Chapter 9 Programming Exercise 4 (Name Search)** on page 371 in your textbook with the following additional **program requirements**:
   - Program functionality should execute as follows:
     - **Create** an array of 20 **names** that is populated with values from the data file **`names.dat`**. The data file can contain **more or less** than the number of array elements.
     - **Sort** the array of 20 **names** in ascending order.
     - **Display** the sorted list of **names** to the user with a descriptive message.

  - **Prompt** the user to enter a name to search and use the search name to determine if it is in the array of **`names`**.
  - **If the name is found** in the list, identify the ordered number (in the array) of the user requested name. **If the name is not found** in the list, display an error message indicating the name is not in the list.

- Include **modules** (at least) to do the following:
  - Read data from file into **`names`** array
  - Sort **`names`** array
  - Display the **`names`** array
- Include **functions** (at least) to do the following:
  - Search the **`names`** array for a given name and return the index of found, -1 otherwise

a) Use a software application to create the flowchart and attach it to this lab coversheet (**be sure to label the hardcopy with your name, date, class, and lab assignment number**). (*25 points*)

b) Create the **Visual Basic** source code that represents the pseudocode requirements from the previous step. The VB source code must have the following for full credit:

- Program header comments that include your **name, date, class, and short problem description**
- End of program comments that include **output from sample program run**

Attach a copy of your source code to this lab coversheet. (*15 points*)