**PROGRAMMING ASSIGNMENT 1**

Write your responses to parts 2 and 4 in the ‘Programming Assignment Documentation Template’ found in ManageBac. Make sure to include your name and the programming assignment number. Your code can be uploaded alongside the accompanying word document.

PART 1: PROBLEM STATEMENT

I run a business and have been storing customer’s names in a collection of names called NAMES. Right now, my customer names are Joe, Jerry, Jerome, Jeremey, Josh, John, Jerald, Jeraldo, June, Jane, and Joey, in that order.

I want to move my collection of names into an array, and then print the contents of that array in reverse order. So, I should see the names printed out starting with Joey, then Jane, and so on.

Even if I add more customers to the collection, I want this program to still be able to work, so don’t just make the program print out the words that are in the collection without properly making an array and printing it in reverse.

PART 2: BRAINSTORMING THE ALGORITHM

Before you jump into writing any code, jot down your thought process. Then, write out an algorithm in plain language for what you intend to do with the code, be descriptive. Do this step in the ‘Programming Assignment Documentation Template’ found in ManageBac.

PART 3: WRITE THE PROGRAM

Write your code in a .txt file. You may test that your code runs correctly using the online pseudocode compiler found at [ibcomp.fis.edu/pseudocode/pcode.html](http://ibcomp.fis.edu/pseudocode/pcode.html).

PART 4: REFLECTION

Answer the following questions in the ‘Programming Assignment Documentation Template’ found in ManageBac.

1. What part of your algorithm changed when converting from plain language to pseudocode, if any?
2. For what reason did we convert the collection into an array to print it backwards?
3. Generally speaking, which data structure serves the purposes of holding customer names for a business ***best***? Arrays or Collections? Think about the way that a business interacts with customers.