**BCS 230 Lab – Pointers with Array**

***Overview***

Write a program that uses a dynamic array of a class.

***Part 1 – Create Solution***

Create a new solution and add the following files to it:

* Player.h – Add to the Headers folder.
* Player.cpp – Add to the Source folder.
* Main.cpp – Add to the Source folder. Will contain the main function.

***Part 2 – Player Class***

Write a program that contains a class called Player. This class should contain two member variables: name, score.

Player class specifications:

You should write get/set methods for all member variables.

You should write a default constructor initializes the member variables to appropriate default values.

Create an instance of Player in main. You should set the values on the instance and then print them out on the console.

***Part 3 – Dynamic Array in Main***

Declare a variable that can hold a dynamically allocated array of Player.

Write code that will ask the user how big of an array of Player that they want to create. Once you get that input data create an array of that size.

Next you should write code that asks the user to enter data for every element of the array. Hint: Need a loop for this.

***Modify The Program***

Modify the program so that it will read in the Player data from a data file instead of standard input. Ask the user to enter a filename and then read the data from that filename. You will have to dynamically allocate an array based on the number of players indicated in the file (see file format below).

***File Format***

#OfPlayers

PlayerName PlayerScore

…

PlayerName PlayerScore

***Example File***

2

Derek 100

Alex 90