**BCS 230 Lab – Pointers Dynamic in Class**

***Overview***

Write a program that contains a class called Movie. This class will use pointer member variables to store its data.

***Part 1***

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

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

***Part 2***

Movie class specifications:

1. Member variables: Name, Rating
2. You should ***dynamically*** allocate all member variables.
3. You should write get/set methods for all member variables.
4. You should write a constructor that takes two parameters and initializes the member variables.
5. You should write a destructor.
6. Add code to the destructor. In addition to any other code you may put in the destructor you should also add a cout statement that will print the message “Destructor Called”.

You need to figure out where to allocate and release memory.

Create an instance of Movie in main. Make sure you call the two parameter constructor. Print the data stored in the Movie instance on screen.

***Part 3***

Modify the previous program. Make the following changes:

1. Add a default constructor that initializes the data as follows:

name 🡨 “NO NAME”

gpa 🡨 0

1. Inside of main create a dynamically allocated two element array of Movie objects.
2. Set the values of both elements of the array.
3. Make sure you release memory allocated to the array.
4. Write a method on the Movie class called Show that will display the values of all member variables.
5. Write a loop that will iterate through the array and display the contents of each Movie object.