**1050 Programming Logic**

Lab 4 (20 points total)

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Instructions:***

1. Create a solution called Lab4 inside of your GitHub repository.
2. In a comment in code, describe the four basic elements of the counter-controlled repetition.
3. In a comment in code, compare and contrast the while and for repetition statements.
4. In a comment in code, discuss a specific example when it would be more appropriate to use a do-while statement than a while statement. Explain why.
5. Create a for loop that goes from 1-100 using a variable named i as the counter. Each time through the loop, output whether or not the variable is even or odd.

*Hint:* Use and if-else statement and the modulus % operator to determine whether the variable is even or odd. Example: if ((i % 2) == 0) // it’s even

1. Use an if…else-if…else statement to output the following based on an int temp that is input by the user. Prompt the user with “Please enter a temperature”.

**Input output**

< 10 Polar Bear

< 20 Penguin

< 40 Moose

< 50 Reindeer

< 60 Deer

< 70 Turtle

< 80 Lion

< 90 Fish

Default Bug

1. The following code is meant to loop and output 10-20, each number on a separate line. What’s wrong? Copy it into your solution and fix the problem.

int i = 10;

while (i < 21)

{

Console.WriteLine(i);

}

*Example output:*



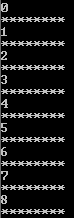
1. The following statement is supposed to output every number from 0-100 separated by a line with asterisks on it. What is wrong with the code?Copy it into your solution and fix the problem.

for (int i = 0; i < 101; i++)

Console.WriteLine(i);

Console.WriteLine("\*\*\*\*\*\*\*\*");

*Example output:*



***Deliverables:***

Commit and push your project to your GitHub repository. Before submitting the link in Blackboard, it would be a good idea to log into github.com and make sure all of the changes were successfully pushed (uploaded). Submit the URL to your GitHub repository in the comments section of the Blackboard assignment. Please do not attach any files to the Blackboard submission.