**CS240 Programming In C**

Homework 2

Loops in C

100 pts

Due Mar. 3 11:59 pm

(30 pts.) Please write a program(Q1.c) where you will print stars in C using loops. Your program will take any integer as an input and will print the corresponding rows of stars. For example, if the user input is 10, your output should look something like this:

A screenshot of a computer program

Description automatically generated

If your program does not print the stars in the specified shape you will automatically incur a 40 point deduction. Please make sure your code is thoroughly tested on both your local machine and the Unix machine.

(30 pts.) Please write a program (Q2.c) where you will find the least common multiple(LCM) of two numbers. Your program will take two inputs. One input for the first value and another input for the second value. Your program will then calculate the LCM of these two numbers. An example is shown below:

A black screen with white text

Description automatically generated

Your program must prompt the user for two inputs, and you must use for loops to find the LCM of these two numbers. Failure to do so will automatically incur a 30-point deduction.

(40 pts.) Please write a program(Q3.c) where you will find the sum of the series,

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Your program will take two inputs. One input for the value of x and one value for how many term in the series. Finally, you will calculate the values of the series and then print out the final sum. An example is shown below:

A black screen with white text

Description automatically generated

Notice that the exponent values increase by 2 and not by 1. Please note that you will need to use math.h and you must use a loop to calculate the values. Failure to do so will result in -40 points.

Please submit the following to the CS Unix Server

* Please make a directory under cs240 titled Hw2
* Please submit 3 .c files to your Hw1 directory Q1.c,Q2.c,Q3.c
* A makefile to compile all of your programs
* A readme detailing your solutions and the approach you took

Please note all .c files should have a header like this:  
  
A text on a white background

Description automatically generated

**Please note that if your code does not compile with the command make you will automatically incur a 50 point deduction and your code will be graded from there. Please thoroughly test all of your codes before submission. Please do not run or compile your code after the submission deadline. Running or compiling the code after the deadline may result in a zero for your assignment**