**CSC 1101 – Problem Solving and Programming Laboratory – Winter 2019**

**Lab 03 – Trevor Trusty**

**25 points – Due January 22, end-of-class**

**a)** Save this document with your name and the lab assignment number somewhere in the file name.

**b)** Type/paste your answers into the document.

c) Submit this document and your .cpp file(s) to the Canvas item where you downloaded this document. Do not submit a zip file but individually attach your files.

You are repainting a room and you need to determine how many square feet the room is to buy paint. Make a copy of the C++ template for your applicationand make the following edits:

1) Rename the copy you made to **Lab03.cpp.**

2) Complete the header comment.

3) Declare 3 variables:

● Integers (type int) *width*, *height*, and *totalArea* with three initial values.

4) Calculate *totalArea* of the four walls.

5) Modify the application header and close to contain the application name.

6) Run the program and output your results.

*[your program code here]\**

**//==========================================================**

**//**

**// Title: Area Calculation**

**// Course: CSC 1101**

**// Lab Number: Lab03**

**// Author: Trevor Trusty**

**// Date: 1/22/2019**

**// Description:**

**// Console program that takes a width and height given in**

**// the source code, and outputs width, height, and area to the user.**

**//==========================================================**

**#include <conio.h> // For function getch()**

**#include <cstdlib> // For several general-purpose functions**

**#include <fstream> // For file handling**

**#include <iomanip> // For formatted output**

**#include <iostream> // For cin, cout, and system**

**#include <string> // For string data type**

**using namespace std; // So "std::cout" may be abbreviated to "cout"**

**int main()**

**{**

**// Declare variables**

**int width = 5;**

**int height = 8;**

**int totalArea = width \* height;**

**string appName = "Area Calculation";**

**// Show application header**

**cout << "Welcome to my " << appName << " program!" << endl;**

**cout << "--------------------------" << endl << endl;**

**// Read dimensions from console**

**cout << "The Width is " << width << " feet." << endl;**

**cout << "The Height is " << height << " feet." << endl << endl;**

**cout << "The total area of the four walls is " << totalArea << " square feet." << endl;**

**// Show application close**

**cout << "\nEnd of " << appName << endl << endl;**

**// Pause before application window closes**

**cout << "Press any key to exit ..." << endl;**

**\_getch();**

**}**

*[your program output here]\*\**

