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

**Lab 1 – Trevor Trusty**

**25 points – Due January 15, end of lab**

**a)** Save this document with your name and the homework 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've been hired by *Conversion Tables* to edit a C++ console application that displays ten of the ASCII characters and their corresponding decimal, hexadecimal, octal, and binary codes. Download file **Lab01-01.cpp** which contains the code to be edited. Create a C++ console application project in Visual Studio or another tool. Add the downloaded source code file to the project, or copy its contents to a project source code file. Make the following edits to the code file:

1) Add a header comment in the form found in the **C++ template**.

2) Modify the **cout statements** such that the codes appear under the correct column headings. You only need to add spaces before the codes to align them under the headings. The characters should be left-justified within their column, and the codes should be right-justified within their four columns.

*Cpp Input::*

//==========================================================

//

// Title: ACSII Conversion Table

// Course: CSC 1101

// Lab Number: Lab 1

// Author: Trevor Trusty

// Date: 1/15/2019

// Description:

// Console application that displays 10 common ACSII characters and shows

// the corresponding decimal, hexadecimal, octal, and binary values in a table.

//

//==========================================================

#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()

{

cout << "Welcome to Conversion Tables" << endl;

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

//ASCII Conversion table

cout << "Character Decimal Hexadecimal Octal Binary" << endl << endl;

cout << "space 32 20 40 100000" << endl;

cout << "! 33 21 41 100001" << endl;

cout << "\\ 34 22 42 100010" << endl;

cout << "# 35 23 43 100011" << endl;

cout << "$ 36 24 44 100100" << endl;

cout << "% 37 25 45 100101" << endl;

cout << "& 38 26 46 100110" << endl;

cout << "' 39 27 47 100111" << endl;

cout << "( 40 28 50 101000" << endl;

cout << ") 41 29 51 101001" << endl << endl;

cout << "End of Conversion Tables" << endl << endl;

// Pause before application window closes

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

\_getch();

}

*Program Output:*

