

Computer Information Systems

C++ Programming

Conversion Lab

Name: _____

To convert temperatures from Fahrenheit to Celsius, the formula is:

$$\text{Celsius} = (\text{Fahrenheit} - 32) * 5/9$$

To convert temperatures from Celsius to Fahrenheit, the formula is:

$$\text{Fahrenheit} = 9/5 * \text{Celsius} + 32$$

Using the correct style of math (either floating or integer, remember the difference from our discussion yesterday), complete the following program and then fill in the table below with the correct values. Replace the “starter” code with your code, then print this out and turn it in. If you do a copy and paste from this document into your program, you will need to correct all of the “ as Word creates “fancy” double-quotes which will not work in C++.

Code:

```
#include <iostream>
using namespace std;

int main ()
{
    char cConvChoice; // gets the user's conversion option
    // Any additional variable definitions should go here

    cout << "Converting from Fahrenheit to Celsius (F) or Celsius to Fahrenheit (C)?";
    cin >> cConvChoice;

    // Your code goes here. You need to check if the user entered an F, and if so have the user enter the
    // temperature and then convert from Fahrenheit to Celsius using the formula's above. If the user entered a
    // C, the do the same concept, only convert from Celsius to Fahrenheit. Don't forget to display the correct
    // values.

    Return 0;
}
```

Table to fill in:

Temp In Fahrenheit	Temp In Celsius	Temp In Fahrenheit	Temp in Celsius	Temp In Fahrenheit	Temp in Celsius
0		104		89	
	0		40		10
65		212		20	
	20		15		30