ECCS 1611 – Programming 1 Name: Group 14

Fall Semester 2020

Pre-Lab 03– Small Group Work - 2 September 2020

Please record below your group’s responses to each of the posed questions.

1. Why is tax calculation a potential problem?

Tax Calculation used to be based on always rounding up and now it has been changed to a tradition rounding method. In addition to this, each state has their own tax laws which can make programs that are run across state lines tricky.

1. How should the tax calculation be implemented as part of a C++ program?

First, the user must input the tax rate for their location. After that, the user must input the total cost of the purchase. Finally, using the tax rules listed in the provided document, compute the amount needed due to taxes and add that tax into the total cost

1. What would be the pseudocode for a program that demonstrates our answer to question 2?

**Prompt User to enter tax rate**

**Prompt User to enter total cost of purchase**

**Multiply total cost by tax rate**

**If (3rd decimal place > 4)**

**Round up**

**Else**

**Round down**

**Add tax rate to total cost**

1. What would be an effective way of validating our answer to question 2?

Using the examples from the provided document as unit tests for our program would be a safe and effective way to ensure that our program runs.

***You can put your pseudocode in this file or submit a separate one. You can use a whiteboard and take a picture. Whatever your team prefers.***