## C++ Chapter 2 Practice Problem

### Monday:

Write a program that computes the tax and tip on a restaurant bill for a patron with a $44.50 meal charge. The tax should be 6.75% of the meal cost. The tip should be 15 percent of the total after adding the tax. Display the meal cost, tax amount, tip amount, and total bill on the screen with appropriate text.

### Wednesday:

An electronics company makes circuit boards that cost $14.95 each to produce. Write a program to determine how much the company should sell them for if it wants to make a 35% profit. Display the results with appropriate text. **NOTE: To have a 35% profit, the selling price of a circuit board that costs $14.95 to produce should be $20.1825.**

Extra Credit (5 pts):

A particular brand of paint covers 340 square feet per gallon. Write a program to determine and report approximately how many gallons of paint will be needed to paint two coats on a wooden fence that is 6 feet high and 100 feet long.

Additional Practice Programs

Write a program that allows the user to enter a time in seconds and then outputs how far an object would drop if it is in a freefall for the input length of time. Assume no friction or resistance from air and a constant acceleration of 32 feet per second due to gravity. Use the following equation:

**Distance = ½ x acceleration x time2**

Submit source code to the assignment in WebStudy.