Programming Assignment #2

Write a program that computes the tax and tip on a restaurant bill for a patron with

a $88.67 meal charge. The tax should be 7.75 percent of the meal cost. The tip should

be 20 percent of the total after adding the tax. Display the meal cost, tax amount, tip

amount, and total bill on the screen. Save this program in a file named restaurant.cpp.

You have been given a job as a programmer on a Cyborg supercomputer. In order to

accomplish some calculations, you need to know how many bytes the following data

types use: char, int, float, and double. You do not have any manuals, so you can’t

look this information up. Write a C++ program that will determine the amount of

memory used by these types and display the information on the screen. Save this program in a file named cyborg.cpp.

You have a hot dog making machine that makes 3 hot dogs per minute. These hot dogs are then put into packages that have 8 hot dogs in each package. Write a program that computes the following:

* Total number of hot dogs made by the machine in 60 minutes
* Number of complete 8 hot dog packages we can make from the previous number of hot dogs.
* Number of hot dogs left over from the previous number of packages(i.e.: the hot dogs that didn’t fit into a full package)

Display all three of these values to the screen. Save this program in a file named hotdog.cpp

*Hint*:

The following formula can be used to calculate the total number of hot dogs:

Hot Dogs = Minutes × Hot Dogs Created per Minute

Use integer division to determine the number of complete packages that can be made.

Use the modulus operator(%) to determine the number of hot dogs left over.

Submit all three program files by repeatedly selecting the “+Add Another File” link in the assignment submission window.