LAB #10 – More OOP

First!!!
Log into Blackboard, and make sure you Lab grades are correct. Make sure you clear any unresolved lab disputes in this lab with your lab TAs. TAs will not answer anymore lab questions after this lab.

Second!!
For those of you who didn’t finish lab #9, finish this lab, and make sure you get checked off for it because we don’t have another lab!!

Third!
Next, finish this lab during lab time to receive your lab grade. You cannot work on this lab later. As a part of this lab, we will continue practicing with classes.

Get together with someone else in the lab, and write the definition for a class named `GasPump` to be used to model a pump at an automobile service station. Before you go further with this programming exercise, write down the behavior you expect from a gas pump from the point of view of the purchaser.

The following are listed things a gas pump might be expected to do. If your list differs, and you think your list is as good as or better than these, then consult your lab TA. You and your TA should jointly decide what behavior you are to implement. Then implement and test the agreed upon design for a gas pump class.

1. A display of the amount dispensed
2. A display of the amount charged for the amount dispensed
3. A display of the cost per gallon, liter, or other unit of volume that is used where you reside
4. Before use, the gas pump must reset the amount dispensed and amount charged to zero.
5. Once started, a gas pump continues to dispense fuel, keep track of the amount dispensed, and compute the charge for the amount dispensed until stopped.
6. A stop dispensing control of some kind is needed.

Implement the behavior of the gas pump as declarations of member functions of the gas pump class, then write implementations of these member functions. You will have to decide if there is data the gas pump has to keep track of that the user of the pump should not have access to. If so, make these private member variables.

Include a default constructor in your implementation.

Show your program to a lab TA for lab credit, and enjoy your spring break!!!