**CSC 211/Classes and Static Variables and Functions Lab Assignment Part B**

**Keep on Pumping! Keep on Pumping!**

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Modify your pump class by adding a static data member that is shared by all pump objects, to keep track of the amount of gas in the main tank. This static variable should be initialized to 0.

Additionally add 2 static member functions to the pump class:

1. A static function to fill the main tank with the # of gallons passed as an argument (add this amount to the static data member).
2. A static function to return the # of gallons in the main tank.

Modify your 2 dispensing functions to monitor the amount of gas left in the main tank. Dispensing should stop if the main tank is empty, a message should be displayed to the user, and the main tank should be filled.

Add one final method that prints the totals for the program run to a log file, i.e. the number of gallons sold by the full serve pump, the number of gallons sold by the self serve pump and the amount of gas remaining in the main tank. Prompt the user for the desired name of this log file.

Once you have completed Part B and tested it thoroughly with an appropriate driver program. Your program should be broken into 3 files for separate compilation. Create a header file (.h) for the class interface, a .cpp file for the implementation and a .cpp file for the driver.