

LAB #3
A FULL CLASS
Ted Pawlicki
September 15-16, 2004

This lab should be completed during the scheduled lab sessions. In order to complete this lab you must demonstrate programs to your lab TA. The technical knowledge on how to accomplish these tasks is found in the assigned reading or the lecture notes, but the lab TA will help as well.

Using "notepad", "javac", and "java" on one of the lab computers. Start with the simple JAVA program that prints out a message similar to the "Hello CSC171" demonstrated in lecture. The lab document that you hand in to your TA should answer the following questions. Repeat the question in your lab document, and cut and paste your output for the answers.

1. Write a JAVA class **Car** that has methods the following properties. A car has a certain fuel efficiency (measured in miles/gallon) and a certain amount of fuel in the gas tank. The efficiency is specified by the constructor, and the tank starts empty. Supply a method drive(int miles) that simulates driving the car for a certain distance, reducing the fuel level in the tank, and methods getGas() that returns the current fuel level and addGas(int gallons) to put fuel in the tank.
2. Modify the "HELLO WORLD" to build two cars a "hybrid" with good gas mileage and a "hummer" that is fun to drive. Simulate a few drives and stops at the gas station. Show your output with a printouts similar to "My hummer has driven 5 miles and has 4 gallons remaining" , "I'm putting 20 more gallons in my hybrid" - etc.

NOTE: We should have electronic hand in working next week. Please be patient with the current paper based hand in.