PCS 101, Fall 2017
Sections 5, 6, 7
Homework Assignment 2

Due: 18:00, Dec 10, 2017

Instructions: *Submit your homework solutions to Moodle as a single .zip file using the following naming convention.*

SS_HW02_Surname_FirstName.zip
where SS is the section number 05, 06, 07,
and Surname is your family name, & FirstName is your first name.

Follow the CS101 Java coding style guidelines provided on Moodle (see FAQ).

Question

Implement a class Car with 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 in the constructor, and the initial fuel level is 0. Supply a method **drive** that simulates driving the car for a certain distance, reducing the fuel level in the gas tank, and methods **getGasLevel**, to return the current fuel level, and **addGas**, to tank up.

Implement another class, say TestCar, to test your Car class by creating two instances of Car class and displaying them on the console.

Important note: All of your methods must be preceded by a JavaDoc comment that gives a brief description of the method's purpose and includes @param tag to list parameters and @return tag to describe what it returns, where appropriate.

Sample usage:

```
Car myHybrid;

// a new car with 50 miles per gallon
myHybrid = new Car( 50 );
// Tank 20 gallons
myHybrid.addGas( 20 );
// Drive 100 miles
myHybrid.drive( 100 );
// Print fuel remaining
System.out.println( myHybrid.getGasLevel() );
```