Java Midterm Due Week 5

You may use the “Person” java project as a model

**The specifications of a class that models the fuel efficiency of a car could be:**

**Variables**

int myStartMiles; // Starting odometer reading

int myEndMiles; // Ending odometer reading

double myGallonsUsed; // Gallons of gas used between the readings

**Constructors**

// Creates a new instance of a Car object with the starting odometer reading.

Car(int odometerReading)

**Methods**

//Simulates filling up the tank. Record the current odometer reading and the number of gallons to fill the tank

void fillUp(int odometerReading, double gallons)

// Calculates and returns the miles per gallon for the car.

double calculateMPG()

**1. Implement a Car class with the following properties.**

a. A Car keeps track of the start odometer reading, ending odometer reading, and the number of gallons used between readings.

b. The initial odometer reading is specified in the constructor

c. A method calculateMPG calculates and returns the mile per gallon for the car..

d. A method fillup simulates filling up the tank at a gas station: odometerReading is the current odometer reading and gallons is the number

of gallons that filled the tank. Save these values in instance variables.

e. With this information, miles per gallon can be calculated. Write the method so that it updates the instance variables each time it is called

(simulating another visit to the pumps). After each call, calculateMPG will calculate the latest miles per gallon.