CSCI-101 Programming 1

Lab 14

INSTRUCTIONS

Create a directory named **lab14** in your labs directory. Inside your **Lab14** directory add the following:

I. Write a class named **PickupTruck** that models a pickup truck. The class should have the following:

   A. Private fields for the truck's vehicle identification number (VIN) (String), its make (String), and its model (String).
   B. A constructor that sets the truck's VIN, make, and model.
   C. Getters for all fields.
   D. No setters.
   E. A method that overrides the **Object** class' **toString** method and returns a String containing the data in all of the fields separated by commas.
   F. A method that overrides the **Object** class' **equals** method and returns true if and only if the VIN of the **PickupTruck** that is passed to the method is equal to the VIN of the **PickupTruck** on which equals is called.

II. Write a program in a class named **TruckApp** that satisfies the following:

   A. Create a method named **printTrucks** that takes an array of **PickupTruck** elements as an argument and prints the Strings returned by **toString** for each truck in the array.

   B. In **main** do the following:
      1. Create an array of 2 **PickupTruck** elements and sets the array using instances having the following data:
         - Truck 1: vin: ABC123, make: Ford, model: F-150
         - Truck 2: vin:DEF345, make: Toyota, model: Tacoma
      2. Call **printPickupTrucks**, passing to it the array of **PickupTruck** elements created above.
      3. Using the **PickupTruck** class' **equals** method, determine if Truck 1 is equal to Truck 2 and print to the screen "Trucks are equal" if they are equal; otherwise print "Trucks are not equal".