Lab 15 Fleet of Vehicles

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# Problem

In this code we must make a piece of code that works using the given driver. The code must be able to take in parameters for vehicles, both of type truck and of type car. For both of these types it must take in the make, number of cylinders, and the owners name. For the truck it must take in the towing and load capacity and for the car it must take in the gas millage and number of passangers. This must all be saved and then the fleet of cars will be printed out.

# Solution

I started by making a super class of type vehicle. This class builds a default vehicle and has getters and setters to check for valid inputs. There is also a to string value void and then an equals function to check to make sure the values are correctly stored. Then using inheritance this goes to car or truck. For car it extends Vehicle and adds two more attributes. The constructor intakes 5 files and sends 3 to the super and two to its own setters. The setters check for correct values and the getters return the values. Then there is a toString and equals function that just adds onto the super ones. For truck it is very similar, just with different variables to be stored.

# Implementation Problems Encountered

There were no problems that I encountered in the code.

# Lab Report Questions

1. Inheritance is an extension that enables two objects or more objects to take properties from existing objects.
2. Polymorphism is the codes way to process objects differently based on their class they belong to.