Day67 Cars
3/16/21

Open the repl attached to this assignment. It contains a Vehicle class. A Vehicle object has a String manufacturer and a String model. In the runner code down below I create a Vehicle like this:

```
Vehicle v = new Vehicle("Toyota","Prius C");
```

Your tasks today are as follows:

1) Write the Car class which extends the Vehicle class. A car class has a private int variable **numberOfDoors**. The constructor calls the Vehicle constructor using super with the manufacturer and model. It has a toString which gets the parent toString and then adds the number of doors like this:

```
Toyota: Camry (4 door)
```

When you are ready you can uncomment my Car test in the runner code to make sure it works. My code doesn't print the objects, it just makes sure that you can create the object. If you want to print it, go ahead and add that code.

2. Write the ElectricCar class which extends the Car class. An ElectricCar object has a private int variable **milesOnFullCharge**. Make it so when you print an ElectricCar you get the following:

```
Chevy: Bolt (4 door) 259 miles on full charge
```

When you are ready you can uncomment my ElectricCar test code down below.

3. Create an ArrayList to hold all of the objects.

Write an enhanced for loop to print all of the objects. Remove any other print calls you might have put into the runner code.

4. After you get the ArrayList printing, above that part add one new object of each type to the ArrayList (you choose the manufacturers and models, etc., but do one of each type). Leave my 3 examples, add three of your own, one of each type. In the end your code prints six objects in the Vehicle hierarchy via the enhanced for loop. Sample output:

```
Toyota: Prius C
Toyota: Camry (4 door)
Chevy: Bolt (4 door) 259 miles on full charge
Ford: Ranger
Volkswagen: Eurovan (3 door)
Fiat: 500e (2 door) 90 miles on a full charge
```