

Create a TruckVehicle class. Use inheritance to extend from your Assignment 2b Vehicle class

```
53 */
54 public TruckVehicle(int passengers, int fuelCap, double kpl, String brand,
55                     String model, int year, String license, double height, double width, double cargoLength) {
56     super(passengers, fuelCap, kpl, brand, model, year, license);
57     this.height = height;
58     this.width = width;
59     this.cargoLength = cargoLength;
60 }
61
62 /**
63  * calculates the cargo area
64  */
65 public double calculateCargoArea() {
66     return width * cargoLength;
67 }
68
69 public String toFormattedString() {
70     String res = super.toFormattedString();
71     res += String.format("Truck height: %2.2f\tWidth: %2.2f\tCargo Length: %2.2f\nCargo Area: %2.2f\n",
72                         getHeight(), getWidth(), getCargoLength(), calculateCargoArea());
73     return res;
74 }
75
76 /**
77  * @param args
78  */
79 public static void main(String[] args) {
80     TruckVehicle truck = new TruckVehicle(5, 30, 36, "Chevrolet", "Colorado", 2009, "TEE 990", 10.0, 5.0, 20.0);
81     System.out.println(truck.toFormattedString());
82 }
83
84
85 }
86
```

Problems Javadoc Declaration Console

<terminated> TruckVehicle [Java Application] /Users/yiyizhou/.p2/pool/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.macosx.x86\_64\_15.0.2.v20210201-0955/jre/bin

Brand: Chevrolet	Model: Colorado	Year: 2009	Number of passengers: 5
Fuel Capacity: 30	KPL: 36.00	Range: 1080.00	License: TEE 990
Truck height: 10.00	Width: 5.00	Cargo Length: 20.00	
Cargo Area: 100.00			

Create a RentalAgencyIO class: This class will permit Vehicle information to be stored (and possibly retrieved) from disk. BONUS (+5 pts) Implement the load() method functionality and read the contents written by your save() method back into a new Vehicle classes. *Can you recreate the original Vehicle instances? What about a TruckVehicle class?*

Eclipse - Example.java/src/edu/neu/csye6200/RentalAgencyIO.java - Eclipse IDE

```

125 } catch (FileNotFoundException e) {
126     e.printStackTrace();
127 }
128 return res;
129 }
130 public void test() throws IOException {
131     Vehicle minivan = new Vehicle(4, 15, 20, "Nissan", "Frontier", 2015, "BEE 234");
132     Vehicle sportscar = new Vehicle(2, 20, 18, "Ford", "Mustang", 2011, "ABV 789");
133     TruckVehicle truck = new TruckVehicle(5, 30, 36, "Chevrolet", "Colorado", 2009, "TEE 990", 10, 5, 20);
134     ArrayList<Vehicle> list = new ArrayList<>(Arrays.asList(minivan, sportscar, truck));
135     save(list, "src/edu/neu/csye6200/io/car.txt");
136     load("src/edu/neu/csye6200/io/car.txt");
137 }
138
139 /**
140  * @param args
141  */
142 public static void main(String[] args) {
143     RentalAgencyIO io = new RentalAgencyIO();
144     try {
145         io.test();
146     } catch (IOException e) {
147         e.printStackTrace();
148     }
149 }

```

Problems @ Javadoc Declaration Console

<terminated> RentalAgencyIO [Java Application] /Users/yiyizhou/.p2/pool/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.macosx.x86\_64\_15.0.2.v20210

File written successfully  
file found, start reading lines

Brand: Nissan	Model: Frontier	Year: 2015	Number of passengers: 4
Fuel Capacity: 15	KPL: 20.00	Range: 300.00	License: BEE 234
Brand: Ford	Model: Mustang	Year: 2011	Number of passengers: 2
Fuel Capacity: 20	KPL: 18.00	Range: 360.00	License: ABV 789
Brand: Chevrolet	Model: Colorado	Year: 2009	Number of passengers: 5
Fuel Capacity: 30	KPL: 36.00	Range: 1080.00	License: TEE 990
Truck height: 10.00	Width: 5.00	Cargo Length: 20.00	
Cargo Area: 100.00			