1. Create a Vehicle hierarchy.

- Start with a base class of a Vehicle.
- Create Car class that inherits from this base class.
- Create another class, a specific type of Car that inherits from the Car class.
- Some general behaviour would be steering, changing gears, and moving (speed in other words)
- You have to decide where you'll put the above mentioned methods and for the specific type of Car you have to add some state specific to that Car.

NOTE: No testing is required for this exercise.

2. The Swimming Company has asked you to write an application that calculates the volume of cuboid shaped pools.

- Write a class with the name Rectangle. The class needs two fields (instance variable) with name width and length both of type double.

The class needs to have one constructor with parameters width and length both of type double and it needs to initialize the fields.

In case the width parameter is less than 0 it needs to set the width field value to 0.
In case the length parameter is less than 0 it needs to set the length field value to 0.

Add the following methods (instance methods):
* Getters for all fields.
* Method named getArea without any parameters, it needs to return the calculated area (width * length).

- Write a class with the name Cuboid that extends Rectangle class. The class needs one field (instance variable) with name height of type double.

The class needs to have one constructor with three parameters width, length, and height all of type double. It needs to call parent constructor and initialize a height field.

In case the height parameter is less than 0 it needs to set the height field value to 0.

Write the following methods (instance methods):
* Getter for the height field.
* Method named getVolume without any parameters, it needs to return the calculated volume.

TEST EXAMPLE

→ TEST CODE:

```
Rectangle rectangle = new Rectangle(5, 10);
System.out.println("rectangle.width= " + rectangle.getWidth());
System.out.println("rectangle.length= " + rectangle.getLength());
System.out.println("rectangle.area= " + rectangle.getArea());
```

```
Cuboid cuboid = new Cuboid(5,10,5);
System.out.println("cuboid.width= " + cuboid.getWidth());
System.out.println("cuboid.length= " + cuboid.getLength());
System.out.println("cuboid.area= " + cuboid.getArea());
System.out.println("cuboid.height= " + cuboid.getHeight());
System.out.println("cuboid.volume= " + cuboid.getVolume());
```

→ OUTPUT

```
rectangle.width= 5.0
rectangle.length= 10.0
rectangle.area= 50.0
cuboid.width= 5.0
cuboid.length= 10.0
cuboid.area= 50.0
cuboid.height= 5.0
cuboid.volume= 250.0
```