BJP5 Exercise 9.4: MonsterTruck

Language/Type: Java classes implementing inheritance instance methods
Related Links: Car.java
Author: Marty Stepp (on 2019/09/19)

Suppose that the following two classes have been declared:

```
public class Car {
    public void m1() {
        System.out.println("car 1");
    }

    public void m2() {
        System.out.println("car 2");
    }

    public String toString() {
        return "vroom";
    }
}
public class Truck extends Car {
    public void m1() {
        System.out.println("truck 1");
    }

    public void m2() {
        super.m1();
    }

    public String toString() {
        return super.toString() + super.toString();
    }
}
```

Write a class `MonsterTruck` whose methods have the behavior below. Don't just print/return the outpu inheritance to reuse behavior from the superclass.

Method	Output/Return
`m1`	`monster 1`
`m2`	`truck 1` `car 1`
`toString`	`"monster vroomvroom"`

Type your solution here:

```
1  public class MonsterTruck extends Truck {
2      public void m1(){
3          System.out.println("monster 1");
4      }
5      public void m2(){
6          super.m1();
7          super.m2();
8      }
9      public String toString(){
10         return ("monster " + super.toString());
11     }
12
13 }
```

This is an **inheritance problem.** Write a Java class using inheritance. (You do not need to write any `import` statements.)

Submit

You passed 3 of 3 tests.

BJP5 Self-Check 9.8: CarTruck

Language/Type: Java classes inheritance mystery
Author: Marty Stepp (on 2019/09/19)

Consider the following two classes:

```
public class Car {
    public void m1() {
        System.out.println("car 1");
    }

    public void m2() {
        System.out.println("car 2");
    }

    public String toString() {
        return "vroom";
    }
}
public class Truck extends Car {
    public void m1() {
        System.out.println("truck 1");
    }
}
```

And assuming that the following variables have been declared:

```
Car mycar = new Car();
Truck mytruck = new Truck();
```

What is the output from the following statements?

`System.out.println(mycar);`	`vroom`
`mycar.m1();`	`car 1`
`mycar.m2();`	`car 2`
`System.out.println(mytruck);`	`vroom`
`mytruck.m1();`	`truck 1`
`mytruck.m2();`	`car 2`

Submit

You passed 6 of 6 tests.

BJP5 Self-Check 9.9: CarTruck2

Language/Type: Java classes inheritance mystery
Author: Marty Stepp (on 2019/09/19)

Consider the following two classes:

```
public class Car {
    public void m1() {
        System.out.println("car 1");
    }

    public void m2() {
        System.out.println("car 2");
    }

    public String toString() {
        return "vroom";
    }
}
public class Truck extends Car {
    public void m1() {
        System.out.println("truck 1");
    }

    public void m2() {
        super.m1();
    }

    public String toString() {
        return super.toString() + super.toString();
    }
}
```

And assuming that the following variable has been declared:

```
Truck mytruck = new Truck();
```

What is the output from the following statements?

`System.out.println(mytruck);`	`vroomvroom`
`mytruck.m1();`	`truck 1`
`mytruck.m2();`	`car 1`

Submit

You passed 3 of 3 tests.

BJP5 Self-Check 9.10: inheritanceVariableSyntax

Language/Type: Java classes inheritance syntax variables
Author: Marty Stepp (on 2019/09/19)

Consider the following classes:

```
public class Vehicle {...}
public class Car extends Vehicle {...}
public class SUV extends Car {...}
```

Which of the following are legal statements?

a. ☑ Vehicle v = new SUV();
b. ☑ SUV s = new SUV();
c. ☑ Car c = new SUV();
d. ☐ SUV s = new Car();
e. ☐ Car c = new Vehicle();
f. ☑ Vehicle v = new Car();
(order shuffled)

Submit

You passed 1 of 1 tests.

Go to the next problem: CarTruck

question #1: Which of the following are legal statements?
your answer: Vehicle v = new SUV();
SUV s = new SUV();
Car c = new SUV();
Vehicle v = new Car();
result: pass