○

The method defined on line 42 won't compile. Why not?
The name variable was not defined as static, so name being returned in a static context (as in getname), just won't work.

OUTPUT:
"in ctor 2"
"0 Earth 1 Larry"
"in ctor 2"
"in ctor 2"
"0 Earth 3 Kim"
"0 Earth 3 Kim"
Null
"In ctor 1"
"0 Earth 4 Sam"

MY WORK:
Are there static/class variables?
- private int vertebrae;
  - Vertebrae = 0
    - Starting value of an int is 0
  - Not static, so vertebrae is 0 if called not within a function it's defined in
- public **static** String PLANET = "Earth";
  - PLANET = "Earth"
- private **static** int count;
  - Count = 0;
  - count is static means it increases everytime it's called in any function (its universal within the class)
- public String name;
  - Name = null
- private String species;
  - Species = null

Find main:
```
  public static void main(String[] args){

      //The method defined on line 42 won't compile. Why not?

      //what is the output (assume no compilation errors)
              Vertebrate lion = new Vertebrate(33, "Larry");
              System.out.println(lion.toString());
              lion = new Vertebrate(0, "Kim");
              Vertebrate bear = new Vertebrate(0, "Lisa");
              System.out.println(lion.toString());
```

```
                bear = lion;
                System.out.println(bear.toString());
                System.out.println(lion.getSpecies());
                bear = new Vertebrate("Sam");
                System.out.println(bear.toString());
        }
}
```

- Vertebrate lion = new Vertebrate(33, "Larry");
  - Prints "in ctor 2"
  - Vertebrae = 33
  - Name = "Larry
  - Count = 1;
- System.out.println(lion.toString());
  - "33 Earth 1 Larry"
- lion = new Vertebrate(0, "Kim");
  - "In ctor 2"
  - Vertebrae = 0
  - Name = "Kim"
  - Count = 2;
- Vertebrate bear = new Vertebrate(0, "Lisa");
  - "In ctor 2"
  - Vertebrae = 0
  - Name = "Lisa"
  - Count = 3
- System.out.println(lion.toString());
  - "0 Earth 3 Kim"
- bear = lion;
  - Bear = Vertebrate(0, "Kim")
- System.out.println(bear.toString());
  - "0 Earth 3 Kim"
- System.out.println(lion.getSpecies());
  - Null
- bear = new Vertebrate("Sam");
  - "In ctor 1"
  - This.name = Sam
  - Count = 4;
- System.out.println(bear.toString());
  - "0 Earth 4 Sam"