

## Part 1-3

```
public class Animal {
    private String name;
    private String species;
    private int age;

    // Constructor
    public Animal(String name, String species, int age) {
        this.name = name;
        this.species = species;
        this.age = age;
    }

    // Getters
    public String getName() {
        return name;
    }

    public String getSpecies() {
        return species;
    }

    public int getAge() {
        return age;
    }

    // Behaviors
    public void eat() {
        System.out.println(name + " the " + species + " is eating.");
    }

    public void sleep() {
        System.out.println(name + " the " + species + " is sleeping.");
    }

    public void makeSound() {
        System.out.println(name + " the " + species + " makes a sound.");
    }
}
```

LION.JAVA...

```
public class Lion extends Animal {

    public Lion(String name, int age) {
        // Manually setting inherited fields
        setName(name);
        setSpecies("Lion");
        setAge(age);
    }

    @Override
    public void makeSound() {
        System.out.println(getName() + " the Lion roars loudly!");
    }

    public void hunt() {
        System.out.println(getName() + " the Lion is hunting for prey.");
    }
}
```

#### ZEBRA.JAVA

```
public class Zebra extends Animal {

    public Zebra(String name, int age) {
        setName(name);
        setSpecies("Zebra");
        setAge(age);
    }

    @Override
    public void makeSound() {
        System.out.println(getName() + " the Zebra whinnies.");
    }

    public void graze() {
        System.out.println(getName() + " the Zebra is grazing on grass.");
    }
}
```

## ANIMAL.JAVA

```
import java.util.ArrayList;

public class Zoo {
    private ArrayList<Animal> animals;

    public Zoo() {
        animals = new ArrayList<>();
    }

    public void addAnimal(Animal animal) {
        animals.add(animal);
    }

    public void listAllAnimals() {
        System.out.println("Animals in the Zoo:");
        for (Animal animal : animals) {
            System.out.println("Name: " + animal.getName()
                + ", Species: " + animal.getSpecies()
                + ", Age: " + animal.getAge());
        }
    }
}
```

## FINAL TEST

```
public class Main {
    public static void main(String[] args) {
        Zoo myZoo = new Zoo();

        myZoo.addAnimal(new Lion("Simba", 7));
        myZoo.addAnimal(new Zebra("Marty", 4));
        myZoo.addAnimal(new Animal("Parrot", "Bird", 2));
        myZoo.addAnimal(new Lion("Scar", 8));
        myZoo.addAnimal(new Zebra("Stripes", 5));
        myZoo.addAnimal(new Animal("Monkey", "Primate", 3));

        // Listing all animals
        myZoo.listAllAnimals();
        System.out.println();
    }
}
```

```
// Performing daily routines
myZoo.performDailyRoutine();

// Feeding animals with unique behaviors
myZoo.feedAllAnimals();
}
}
```