class Bird extends Animal{

public String reproduction = "egg";

public String outerCovering = "feather";

private String name;

void move() {

System.out.println("Moves by flying.");

}

void eat() {

System.out.println("Eats birdfood.");

}

// POLYMORPHISM

public void fly() {

System.out.println("The bird is flying.");

}

public void fly(int height) {

System.out.println("The bird is flying " + height + " feet high.");

}

public void fly(String name, int height) {

System.out.println("The " + name + " is flying " + height + " feet high.");

}

public void flyUp() {

System.out.println("Flying up...");

}

public void flyDown() {

System.out.println("Flying down...");

}

}

//INHERITANCE

class Eagle extends Bird {

public String name;

public int lifespan = 15;

//ENCAPSULATION

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

}

abstract class Animal {

// abstract methods

abstract void move();

abstract void eat();

// concrete method

void label() {

System.out.println("Animal's data:");

}}

class TestEagle {

public static void main(String[] args) {

Eagle myEagle = new Eagle();

myEagle.setName("Eagle");

System.out.println("Name: " + myEagle.getName());

System.out.println("Reproduction: " + myEagle.reproduction);

System.out.println("Outer covering: " + myEagle.outerCovering);

System.out.println("Lifespan: " + myEagle.lifespan);

myEagle.flyUp();

myEagle.flyDown();

myEagle.fly();

myEagle.fly(10000);

myEagle.fly("eagle", 10000);

}

}