```
public class Animal {
  public void speak() {
    System.out.println("silence");
  } }

public class Bird extends Animal {
  public void speak() {
    System.out.println("twitter");
  } }

public class Cat extends Mammal {
  public void speak() {
    System.out.println("meow");
  }
  public void purr() {
    System.out.println("purrrrr");
  }  }

public class Dog extends Mammal {
  public void speak() {
    System.out.println("woof");
  }
  public void bark() {
    System.out.println("woof");
  } }

public class Mammal extends Animal {
  public void speak() {
    System.out.println("can't speak");
  }
  public void bark(){
          System.out.println("can't bark");
  } }
```

```
public class Zoo {
  public static void main (String args[]) {
    Dog d = new Dog();
    d.speak(); _____________________________
    d.bark(); ______________________________
    Cat c = new Cat();
    c.speak(); _____________________________
    c.purr(); ______________________________
    Bird b = new Bird();
    b.speak(); _____________________________
    Mammal m = new Mammal();
    m.speak(); _____________________________
    m.bark(); ______________________________
    Animal a = new Animal();
    a.speak(); _____________________________
    Mammal m2 = d;
    m2.bark(); _____________________________1
    m2.speak(); ____________________________
    Animal a1 = d;
    a1.speak(); ____________________________2
    ((Dog)a1).bark(); ______________________
    Mammal m3 = c;
    m3.speak(); ____________________________3
    Animal a2 = b;
    a2.speak(); ____________________________4

    ArrayList<Animal> bunch = new
ArrayList<Animal>();
    bunch.add(b);
    bunch.add(c);
    bunch.add(d);
    // polymorphism
    for (int i = 0; i < 3; i++) {
      Animal ai = bunch.get(i);
      ai.speak();     }  } }

_____________________________5
_____________________________6
_____________________________7
```