```java
//Solution exercice 19:
package pet;
import java.util.Random;
public class Pet {
    String name;
    String color;

    Pet(){name="pet"; color="black";}

    Pet(String n, String col){name=n; color=col;}

    void setName(String n){name=n;}
    String getName(){return name;}

    void setColor(String c){color=c;}
    String getColor(){return color;}

    String Speak(){return "I am your cuddly pet";}

    void Afficher(){System.out.println(name +" "+ color);}
}

class Chamellon extends Pet{

    void changeColor(){
        Random n=new Random(); int c=n.nextInt(4);
        if (c==0)super.setColor("Red");
        else if (c==1)super.setColor( "Green");
        else if (c==2)super.setColor("Yellow");
        else super.setColor("Blue");
    }

    @Override
    String Speak() { return "Silent all time";}
}

class Cat extends Pet{

    Cat(){super("mimi", "Red");}
    Cat(String name, String color){super(name, color);}

    boolean Sleep(){
    Random n=new Random(); int sleep=n.nextInt(2);
        if (sleep==0)return false; else return true;
    }

    @Override
    String Speak(){
    return "Dont give me orders \n I speak only when I want";
    }

    @Override
    void Afficher() {
    super.Afficher();
    if (Sleep()) System.out.println("Cat is sleeping");
    else System.out.println("Cat is awake");
    }
}

class Dog extends Pet{
 Dog(){super("chacha", "Red");}
 Dog(String name, String color){super(name, color);}

 void Catchsteak(){System.out.println("Ok Master, I do");}

    @Override
    String Speak(){return super.Speak()+"I speak only whenever you
    want to";
    } }
```

Listing 6 – Solution exercice 19-Classe Pet - Cat - Dog et Chamillon