```
public class Dog{
    private String color = "Black";
    private String action = "";
    //your code here
}
public class Midterm{
    public static void main(String[] args){
        Dog scooby = new Dog();
        scooby.setAction("Barking");
        scooby.printDog();
        Dog odie = new Dog ("Red");
        odie.setAction("Sitting");
        odie.printDog();
        Dog goofy = new Dog("Blue");
        goofy.setAction("Eating");
        goofy.printDog();
        scooby.setColor("Brown");
        scooby.printDog();
    }
}
```

Complete the **Dog** class so the **main** method above produces the following output:

```
Black dog is Barking.
Red dog is Sitting.
Blue dog is Eating.
Brown dog is Barking.
```

```java
Test5 t1 = new Test5();
t1.methodA();
t1.methodA();
Test5 t2 = new Test5(2,3);
t2.methodA();
t2.methodA();
```

```java
public class Test5{
   private int sum;
   private int y;
   private int x;
   public Test5(){
      sum = 1;
      y = 1;
   }
   public Test5(int x, int p){
      sum = x;
      y = p;
   }
   public void methodA(){
      int x=0;
      int[] msg = new int[1];
      msg[0] = 5;
      y = y + methodB(msg, msg[0]) + y;
      x = y + methodB(methodB(msg, msg[0]), msg[0]) + sum;
      sum = x + y + msg[0];
      System.out.println(this.x + " " + y+ " " + sum);
   }
   private int methodB(int[] mg2, int y){
      int x = 0;
      this.y = y - mg2[0];
      this.x = x - 33 + y;
      x = y + this.y;
      sum = sum - x + y;
      mg2[0] = y - sum;
      System.out.println(x + " " + y+ " " + sum);
      return mg2[0];
   }
    private int methodB(int sum, int mg1){
      int x = 0;
      y = y - this.sum;
      x = x + 33 + mg1;
      sum = sum + x + y;
      mg1 = y - mg1;
      System.out.println(x + " " + y+ " " + sum);
      return mg1;
   }
}
```

```java
public class Cat{
public String color = "White";
public String action = "sitting";
//your code here
}
public class Test{
public static void main(String [] args){
Cat c1 = new Cat();
Cat c2 = new Cat("Black");
Cat c3 = new Cat("Brown", "jumping");
Cat c4 = new Cat("Red", "purring");
c1.printCat();
c2.printCat();
c3.printCat();
c4.printCat();
c1.changeColor("Blue");
c3.changeColor("Purple");
c1.printCat();
c3.printCat();
}
}
```

Complete the **Cat** class so the **main** method above produces the following output:

```
White cat is sitting
Black cat is sitting
Brown cat is jumping
Red cat is purring
Blue cat is sitting
Purple cat is jumping
```