

A1: Animal

This is the easiest assignment ever. Be ready.

On sheet 1, you were given the code for Animal and Animal Runner.



1. Make a new project for 6_Objects.
2. Inside the project, make a new class: Animal. Paste in the Animal class. Save.
3. Inside the project, make another new class: AnimalRunner. Paste in the AnimalRunner class. Save.
4. Run the AnimalRunner class. Verify that it works.

```
public class Animal {  
  
    private String noise;  
    private String type;  
  
    public Animal () {  
        noise = "meow";  
        type = "cat";  
    }  
  
    public Animal (String a, String s) {  
        noise = s;  
        type = a;  
    }  
  
    public String toString () {  
        return "the " + type + " says " + noise;  
    }  
  
    public String getSound () {  
        return noise;  
    }  
  
    public String getAnimal () {  
        return type;  
    }  
  
    public void setSound (String s) {  
        noise = s;  
    }  
  
    public void setAnimal (String a) {  
        type = a;  
    }  
}
```

```
public boolean equals (Animal two) {
    if (two.getAnimal ().equals (type) && two.getSound ().equals (noise))
        return true;
    else
        return false;
}

public int compareTo (Animal two) {
    if (two.equals (this))
        return 0;
    else if (two.getAnimal ().compareTo (type) >= 0)
        return 1;
    else
        return -1;
}
}
```

```
public class AnimalRunner {
    public static void main (String args[]) {
        new AnimalRunner ();
    }

    public AnimalRunner () {
        Animal spot = new Animal ();
        System.out.println (spot.toString ());
        Animal fluffy = new Animal ("dog", "bark");
        System.out.println (fluffy.toString ());
        System.out.println (fluffy.getSound ());
        fluffy.setSound ("woof");
        System.out.println (fluffy.toString ());
        System.out.println (spot.compareTo (fluffy));
        System.out.println (spot.equals (fluffy));
    }
}
```