Discussion 4

Spring 2015

1 Creating Cats

Given the following classes, fill in the definition of the Cat class so that when greet () is called, the label "Cat" (instead of "Animal") is printed to the screen. Assume that a Cat will make a "Meow!" noise, and that this is all caps for cats who are less than 5 years old.

```
public class Animal {
       protected String name, noise;
2
       protected int age;
3
5
      public Animal(String name, int age) {
           this.name = name;
6
           this.age = age;
7
           this.noise = "Huh?";
8
9
10
       public String makeNoise() {
11
           if (age < 5) {
12
               return noise.toUpperCase();
13
           } else {
14
15
               return noise;
16
       }
17
18
       public void greet() {
19
           System.out.println("Animal " + name + " says: " + makeNoise());
20
21
22
  public class Cat extends Animal {
       public Cat(String name, int age) {
           super(name, age);  // Call superclass' constructor.
           this.noise = "Meow!"; // Change the value of the field.
       @Override
       public void greet() {
           System.out.println("Cat " + name + " says: " + makeNoise());
   }
```