

Inheritance

Overview: Inheritance is a fundamental topic in computer science. Basically, we can create superclasses that we can derive subclasses from. This can simplify our code and make our code more powerful.

Code: <https://github.com/kdutta9/CS-Education>

Let's walk through a simple example. Here is a simple Animal class.

```
/** This class will help teach us about Java and inheritance. */  
public class Animal {  
  
    /** The amount of money in our Account. */  
    public String name;  
  
    /** Define our class in the constructor. */  
    public Animal(String name0) {  
        name = name0;  
    }  
  
    /** Eat some food. */  
    public void eat(String food) {  
        System.out.print(name + " is eating " + food + ".");  
    }  
  
    /** Say something. */  
    public void speak() {  
        System.out.print("");  
    }  
}
```

Now, add this functionality:

1. Create a Dog class: add methods to fetch and bark (fetch() and speak())
2. Create a Cat class: add methods to meow (speak())
3. Create a Bird class: add methods to caw (speak()) and fly (fly())
4. Create a Puppy subclass (modify fetch and speak)
5. Create a Parrot subclass (modify speak to include parameter and English)

These should all be done in different files.