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Week 13

April 16 2023

Week 13 Lecture Notes

Function Overriding

Function overriding is the act of redefining a function in a subclass to override the original function. This is the first step to polymorphism.

Ex:

```
(In base class) void doStuff() {System.out.println("Hello");}
```

```
(In sub class) void doStuff() {System.out.println("Hi");}
```

```
//Now, calling the function from each class would yield different results
```

Polymorphism

Polymorphism is the act of creating many subclasses from a superclass and then overriding functions. This is, in a way, an extension of inheritance by extending the possibilities with inheriting methods.

Ex:

```
(Base class "animal") void sound() {System.out.println("Sound");}
```

```
(Sub class "dog") void sound() {System.out.println("bark");}
```

```
(Sub class "cat") void sound() {System.out.println("meow");}
```

```
animal.sound(); //Sound
```

```
dog.sound(); //bark
```

```
cat.sound(); //meow
```