




CSE 3302  
Programming Languages

Smalltalk  
(cont.)

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Correction of example in lecture 15


```
A>>m2
...
A subclass: #B ... (not "B subclass: #A ...")
B>>m2
  super m2

B subclass: #C...
C>>m1
  self m2

aC := C new.
aC m1
```

What will happen if the lookup of m2 starts from the superclass of message receiver?

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HW3

Array:

- reverse
- max

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An Example

A library has books and clients.


- **Client**: an ID, a name, an address and a collection of the books checked out.
- **Book**: an ID, a title, an author, and a current state, which is either "checked out" or "on shelf".
- **Library**: a collection of customers and a collection of books that are not checked out.

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- Define three classes Library, Book, and Client.

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- Define the initialization methods for these three classes.

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- Define an **allBooksDo**: method for **Library** that iterates over both the books that are checked out and the books that are not checked out.



- Define a **booksTitled**: method for **Library** that returns a collection of all books with a particular title.



- Define the **checkOut**: method for **Client**, which takes a book as an argument and assigns to to the client.



- Define the **checkoutBy**: method for **Book**, which is only called if the book is not checked out. Its argument is the client checking out the book.



- Define the **customer:checksOut**: method for **Library**, which takes a client and a book and records the fact that the client checks out the book. It should check that the book is free before letting the client to check out.