

## CS 1110

Please do this now. Draw three variables on a piece of paper as shown to the right:

b

c

d

Below is a “program” consisting of 3 assignment statement. Execute (carry out, perform) this program, meaning: execute the assignments, in order the order written, 1 at a time.

```
c = b + 2;
c = 2 * b + c; //note c > 5 is an expression. It
d = c > 5;     // true or false depending on whether
               // c is greater than 5 or not.
```

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## CS1110. Lecture 2, 27 Jan 2011. Objects & classes

**Reading for this lecture:** Section 1.3. **study this section over the weekend** and **practice** what is taught using DrJava.



**PLive:** Activities 3-3.1, 3-3.2, 3-3.4 (not 3-3.3), 3-4.1, 3-4.2.

**Summary of lectures:** On course page, click on “Lecture summaries”. See lecture on VideoNote

**Reading for Tuesday, 7 Sep.** Sections 1.4, (p. 41); 13.3.1 (p. 376).

### Quote for the day

**Computers in the future may weigh no more than 1.5 tons.**

—Popular Mech, forecasting the relentless march of science, 1949

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**CMS:** Developed by the CS Department. Java based.

If you have not been receiving emails from us, sent out from the CMS, then either:

1. Not registered in CMS. Email Maria Witlox [mwitlox@cs.cornell.edu](mailto:mwitlox@cs.cornell.edu) and ask her to register you. Needs your netid.
2. Your email is bouncing. Your Cornell system is not set up correctly or the place to which you forward us is having trouble. Best thing to do: email yourself, at [netid@cornell.edu](mailto:netid@cornell.edu), see what happens, and fix it.

**AEWs** 1-credit AEW sections for CS1110. Two hrs/week. Nothing else. Not remedial.

Quiz on Tuesday. Everyone should get 100.

1. What is a type?
2. How do you execute (carry out, perform) the assignment statement?

Mon 7:30-9:25pm:  
Fri 2:30-4:25:

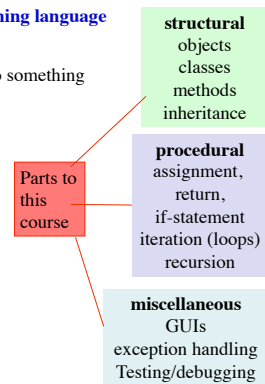
## Two aspects of a programming language

- Organization – structure
- Procedural —commands to do something

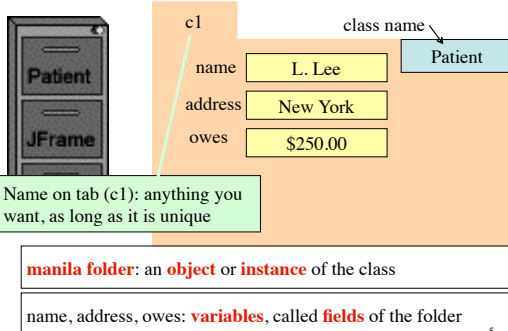
**Example: Recipe book**

- Organization: Several options; here is one:
  - Appetizers
  - list of recipes
  - Beverages
  - list of recipes
  - Soups
  - list of recipes
  - ...

- Procedural: Recipe: sequence of instructions to carry out

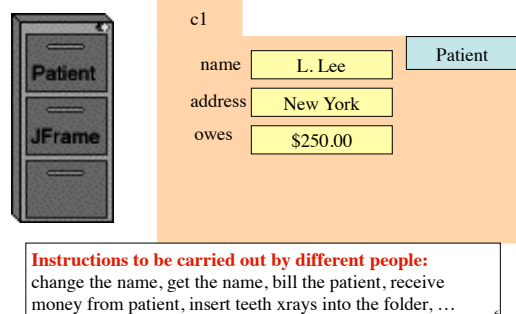


**A class is a file-drawer.** Contents: manila folders, each containing the same kind of information



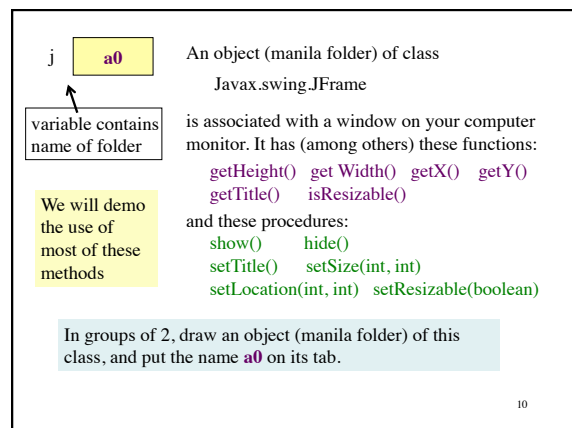
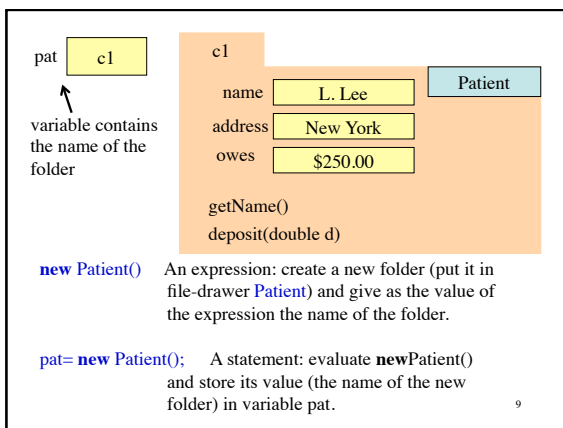
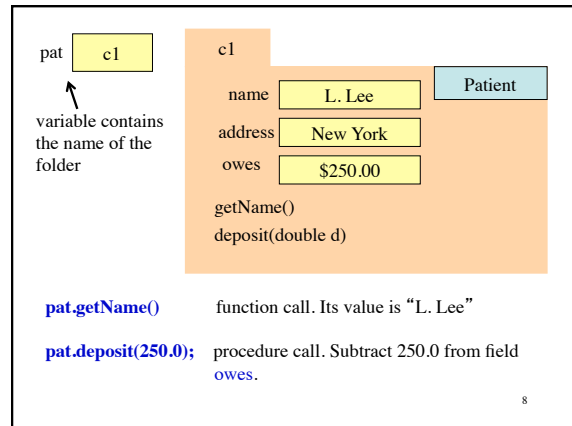
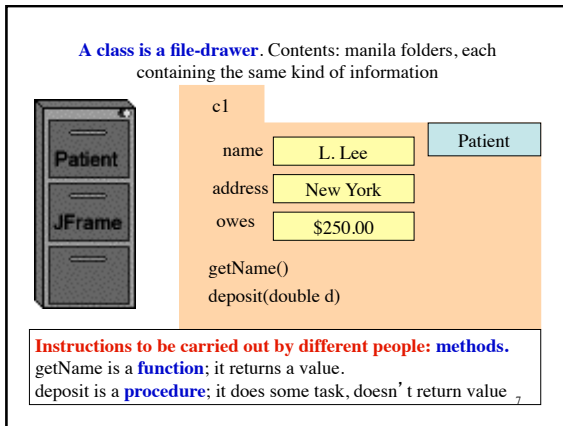
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**A class is a file-drawer.** Contents: manila folders, each containing the same kind of information



**Instructions to be carried out by different people:** change the name, get the name, bill the patient, receive money from patient, insert teeth xrays into the folder, ...

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**Comments from last semester**

I understand classes and objects fairly well, and I thought the file drawer/file folder analogy was very helpful.

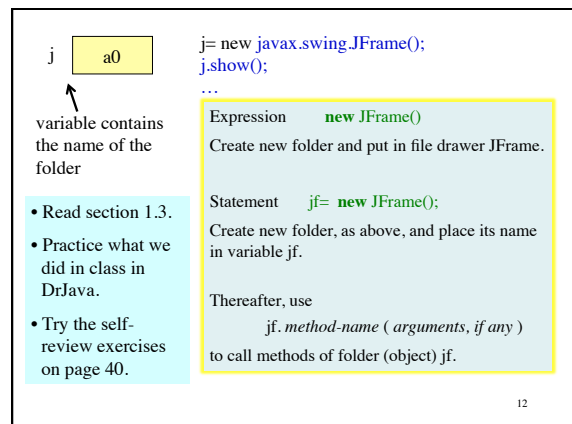
I think I'm definitely prepared for 2110. The folder/file drawer analogy was actually very helpful for a first-time Java programmer in understanding them.

I did learn the concept before coming to this class, CS1110 is really what made me understand how objects and classes work.

The folder was a great way to learn objects and classes. It simplified a very complex concept.

Teaching methods were terrible. ... boxes and folders made the subject more confusing than it should be.

I'm still a bit dubious about the whole file folders and cabinets thing.



**package:** A collection of classes that are placed in the same directory on your hard drive. Think of it as a room that contains file cabinets with one drawer for each class.

package **java.io** classes having to do with input/output

package **java.net** classes having to do with the internet

package **java.awt** classes having to do with making GUIs

package **javax.swing** newer classes having to do with GUIs

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To reference class **JFrame** in package **javax.swing**, use:

**javax.swing.JFrame**

Instead: **import javax.swing.\*;**

Then use simply **JFrame**

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