Announcements

• Lab 2 in recitation this week
• Exam 1 is Friday, February 5th – review in class on Wednesday, February 3rd – Review sheet posted on Course Schedule page of course website.
Class definition: formal description of the properties & capabilities an \textit{instance of the class\ will have} [Java code]

\texttt{\textbf{object}}

\underline{new \ Name of Object} \ (\texttt{arg\ argument\ list})

1. Determines the size of the object & reserves appropriate amount of memory
2. Calls the constructor of the class to initialize the object
3. Returns the starting address of the block of memory where the object is stored (a reference to the object)
**Constructor:**

Special method (capacity) used for object creation

→ Sets up the initial state of the object
Syntax: Package declaration

```
package identifier;
```

- keyword
- name of the package
- style: all lower case
- nested packages are separated by ("dots")

```
"graphics, colors."
```

Class definition

```
class header

class body
```

Syntax: class header

- public
- class
- identifier
  - Style: first letter uppercase; subsequent words uppercase

Syntax: class body

```java
{ 3
    typically we put stuff
    between { 3 (optional)
```
Inside a class body

- properties defined
- capabilities defined

First capability: Constructors

- Constructor definition
- Constructor header
- Constructor body
Syntax: constructor header

public identifier ()

name of constructor
which is the same identifier as the class name

Syntax: Constructor body

{} 3

again, usually something inside
Exercise:

Write the Java Source Code for a class named Date in a package named calendar.

```java
package calendar;

public class Date {
    public Date() {
        // Code here for lab3_part1
    }
}
```