Announcements

• Read for next time Chap. 4.1-4.5
• Assignment 4 out
• Reading Quiz for next time
Chap. 6 - if

- **Condition** – must be in ( )’s
- **Body of if/else**
  - 1 statement OR multiple stmts in { }’s
- **Relational operators:**
  - ==  <  >  >=  <=  !=
- **Logic operators:**
  - &&  ||  !

```java
int x=6;
int y = 9;
if ((x<5) || (y >= 6)) {
    x = 3;
    y = 2;
} else
    x = 5;
```
Comparing Strings and Objects

String one = "computer";
String two = "com" + one.substring(3,8);
String three = two;
String four = "science";

System.out.println(two);
if (one == two)       // don’t do
    System.out.println("A");
if (two == three)     // don’t do
    System.out.println("B");
Comparing Strings (cont)

if (one.equals(two))
    System.out.println("C");
if (two.equals(three))
    System.out.println("D");
if (one.compareTo(four) < 0)
    System.out.println("E");
Null and Objects

Chicken bird = null;
// bird = new Chicken(“Pia”, 5.2, 4.2);
if (bird != null)
    bird.eat(2.3);
What is an image?

• Lots of pixels
• Each pixel represents a color

One color
RGB
(45, 10, 67)
Classwork today - Images

• Read in an image.
• Modify transformColor method
  – Given a Color, create and return a new Color
  – See API for Color class
  – “Magically” transformation is applied to all pixels in the image
  – Image is transformed to new image
  – Darken darkens the image
Example: Change red color a little

```java
public Color transformColor (Color current) {
    int red = current.getRed();
    int blue = current.getBlue();
    int yellow = current.getYellow();
    return new Color(red + 50, green, blue);
}
```

CAREFUL! This could cause an error!