Announcements:
Ch 6 OWL assignment up. Programming assignment 4 up.
Exam W, 10/15, 7-8:15, Thompson 102, 106
Second half of class conceptually harder
Tuesday’s class: while looping, break, switch; Wrapper
Classes and JOptionPane from Ch 6 on Thursday.
Office hours this week: W 4-6, TH 2-4 (no 1-2 TH hour this week); Fri 1230-430
Remember that there is no class next Tuesday – it’s Monday schedule.
Finally: OWL assignment 6 is a GREAT warm-up for the midterm! This is also
true of Program 4 – getting that to work, in collaboration with someone else, will
REALLY help.

Some while loop examples –

1) Write a while loop that prints 10-8-6-4-2 in a column.

```java
int j = 10;
while (j > 0){
    System.out.println(j);
    j = j - 2;
}
```

2) Write a while loop that prints 1-4-9-16-25 in a column.

```java
int j = 1;
while (j < 6){
    System.out.println(j*j);
    j++;
}
```

3) Rewrite this for loop as a while loop:

```java
for(int j = 100; j > 20; j = j - 3) System.out.println(j);
```

```java
int j = 100;
while (j > 20){
    System.out.println(j);
    j = j - 3;
}
```

Rethink this for loop with parameters a and b:

```java
int a = 100; int b = 20;
for(int j = a; j > b; j = j - 3) System.out.println(j);
```
Now recast the action of this loop as a method with parameters a and b. (If the method is passed 100 and 20, it should do—that is, print—exactly what the simple loop above does.)

Write a while loop that counts how many times a number must be tripled, starting from 1, in order to exceed 10000. (Thus: 1, 3, 9, 27, … how many entries in the sequence until 10000 is exceeded?)

```java
public void someNums(int a, int b){
    for(int j = a; j > b; j = j - 3) System.out.println(j);
    // no return stmt: method is void
}
```

#1—Code the Weather class
```java
public class Tester {
    public static void main(String[] args) {
        Weather today = new Weather("March", 3, 57, 40); // March 3rd
        System.out.println("high temp for today was " + today.getHighTemp()); //57
        System.out.println("low temp for today was " + today.getLowTemp()); //40
        System.out.println("Temperature swing today was " + today.getTempSwing());
        // temp swing: high-low temp = here 17
        System.out.println("Today's date is " + today.getMonth() + " " +
            today.getDate());
    }
}
```

output from execution of main:

high temp for today was 57
low temp for today was 40
Temperature swing today was 17
Today's date is March 3

From this, create the Weather class
```java
public class Weather{
    private int low;
    private int high;
    private String month;
    private int day;

    public Weather(String month, int day, int low, int high){
        this.low = low;
    }
```
this.high = hight;
this.month = month;
this.day = day;
}

public int getHighTemp(){return high;}
public int getTempSwing(){return (high – low);}
public String getMonth(){return month;}
//etc
}

An exam warm-up example:

Write a complete program (one class is fine) that reads in two ints from the keyboard and then prints out their average.

import java.util.Scanner;

public class TwoInts
{
    public static void main (String[] args)
    {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter two whole numbers");
        int num1 = scan.nextInt();
        int num2 = scan.nextInt(); //separated by white space
        System.out.println("The avg of " + num1 + " " + num2 + " is ");
        System.out.println((num1 + num2)/2.0);
    }
}