Opening Discussion

- Do you have any questions about the quiz?
- Let's look at solutions to the interclass problem.
- What ideas did people come up with for their projects?
  - Text adventure game
  - Fractal generator
  - Graphing calculator
Array Initialization Shortcut

- For small arrays it is often handy to initialize them when we declare them. We can do this by putting the contents of the array in curly braces.
  - int[] a={2,5,7};
  - String[] b={“This”,”is”,”a”,”test”};
- We could actually use this to simplify the code for our T-shirt if we want. We'll definitely use it for the day of the week.
Let's go finish the T-shirt code that we started last class that uses arrays.
There is a form of the for loop in Java built exclusively for looping through the contents of collections.

```java
for(Type varName:collection) { ... }
```

We call it a for-each loop though it still uses just a for.

You can use it in any situation where you don't care about the index of the elements.
- You saw lists in Alice and got to see how handy they can be.
- A list is a general collection of things with a linear ordering to it.
- Java includes different types of lists.
  - LinkedList is good when you will do a lot of inserting and removing.
  - ArrayList is like an array that can grow or shrink.
- The only reason we don't use lists all the time in Java is because the syntax is more bulky than the arrays.
- You specify the type of things that go in the list in angle braces.
The API can tell us all the capabilities of lists. Everything for lists is in java.util.

There is a List interface gives us the general methods.

The LinkedList and ArrayList classes add some additional functionality in certain situations.
Let's keep working through the payroll example now.

I want to have a file that for each day of the week lists employees and how many hours they worked. I want it to print a report listing how much money was paid out each day and how much total money each person should be paid for the week.
■ Are you going to be here on the Wednesday before Thanksgiving?
■ Interclass Problem – Do problem 12.3.