Do you have any questions about the quiz?

Let's look at solutions to the interclass problem.

Will we regularly run out of time before finishing slides?

What is the equivalent of scanf in Java?

Book corrections appreciated.

Do you have any questions about the reading?

Do you have any questions about the assignment?
The problem with using the Object type for general polymorphism is that it many different type checks have to be done at runtime and you lose static type safety.

Using generics we can take our general function interface and make it static typesafe.

How can you combine these more general types of functions?
C had enums. What were they supposed to do? What was the problem with them?

Java includes enums as well. They serve the same goals, but lack the pitfalls.

Java enum syntax can get quite complex, but the basic form is simple and very similar to C.
- How did you handle errors in C? (Consider the fopen function.)
- What are some problems with this method?
Error handling in Java is done with exceptions, not return values or flags.
Normal exceptions can't be ignored and they don't propagate. Runtime exceptions don't propagate.
- For anything that isn't a RuntimeException you have to include handling code. For 
  RuntimeExceptions it is optional.
- If you want to deal with a possible exception in the current method do this:
  - try { 
    - statements
  - } catch(ExceptionType1 e) { 
    - statements
  - } [catch(ExceptionType2 e) { ...} ...]
- If this method can't handle it you add a throws clause to the method and it will go up to the calling 
  method.
  - Type name(args) throws ExType[,...] {...}
Exceptions also have the advantage that they can provide additional information.

- Stack trace.
- Informative message.
- You can create your own exception classes. Strive to have them provide sufficient information for debugging.
Do you have any questions about Java as a language? We are now moving from the language to libraries and problem solving.

Interclass Problem – Write a program that uses a Scanner to read the contents of a file. The hint is that you will have a line something like Scanner sc=new Scanner(new File("filename.txt"));. You can decide what to do with the contents. Be creative. You might consider methods like Double.parseDouble().