# Model 1 Review of Scanner

The `java.util.Scanner` class is useful for reading and parsing text from various sources:

```
// Example 1
Scanner in = new Scanner(System.in);
while (in.hasNextLine()) {
    String line = in.nextLine();
    System.out.println(line);
}

// Example 2
String text = "1 fish 2 fish red fish blue fish";
Scanner sc = new Scanner(text);
System.out.println(sc.nextInt());
System.out.println(sc.next());
System.out.println(sc.nextInt());
System.out.println(sc.next());
```

## Questions (10 min) Start time:

**1.** For each example above, describe what the `Scanner` is scanning.

a) Example 1: `new Scanner(System.in)`

b) Example 2: `new Scanner(text)`

**2.** Based on the documentation for `Scanner`, explain the following:

a) `in.hasNextLine()`

b) `in.nextLine()`

c) `s.nextInt()`

d) `s.next()`

**3**. Open *ScannerDemo.java* in Eclipse, and run the program. Enter three lines of input, and notice the output. Then press Ctrl+D, which is the keyboard shortcut for "end of file" (EOF).

a) In the Console, what color was the user's input?

b) In the Console, what color was the program's output?

c) What was the complete output of the program? (Note: Do not include the input lines.)

**4**. What effect did pressing Ctrl+D have on the program? Explain how you think EOF works.

**5**. Rewrite the code for Example 2 to output each *word* of the string using a `while` loop. Run your code to make sure it works.