## Writing Files

#### 10-19-2011

# **Opening Discussion**

- Natural Midterm Grade Distribution:
  - A 8, B 5, C 8, D 9, F 6
  - Median = 72  $\rightarrow$  8 point curve
- Minute essay comments:
  - Should you understand higher-order functions?
  - Calling functions in other Scala files.
  - Splitting on less organized data.
  - Does the math get worse?
  - What to import and when.
  - Assignment #1 grades/comments.

#### More

- What is exciting about Google+?
- Big numbers in unemployment are counts of people.
- Other uses of reading files.
- How are new programming languages made?
- Because iterators are consumed, do you have to rerun?
- Permutations and combinations.
- MTMOYM (Next Monday at 4pm)
- Solutions to the interclass problem.

## java.util.Scanner

- Java Scanner class sometimes easier for input.
  - hasNext(), next()
  - hasNextInt(), nextInt()
  - hasNextDouble(), nextDouble() ...
- Doesn't produce a Scala collection.
- Needs java.io.File: new Scanner(new File(fileName))
- Always make a new object from the Java libraries using new. Scala typically allows you to leave that off.

# **Closing Files**

- Make sure you always close files when you are done using them.
- Source, Scanner, and pretty much anything else that pulls from a file will have a close() method.

# java.io.PrintWriter

- To write to files use java.io.PrintWriter.
- Create with new PrintWriter(fileName)
- Has print and println methods just like what you have been using to print to screen.

### Flush

- To make certain contents have been written to the file use flush().
- Doing close() will also flush and you should definitely remember to close all files you are writing when done with them.

# **Command Line Arguments**

- In a script, the command line arguments are put in args:Array[String].
- You can do anything with them that you would do with a normal array.

### Examples

- Print some random numbers to a file.
- A file copy with word replace.

## Minute Essay

- Have any questions?
- What can I do that would help you with the material? Are you reading and trying to do exercises and other things from the book?