

































CSE143 Sp03

12-20



















12-29



pul	public void copyFile(String sourceFilename, String destFilename)				
	BufferedReader inFile = new BufferedReader(new FileReader(sourceFilename))				
	BufferedWriter outFile = new BufferedWriter(new FileWriter(destFilename)):				
	String line = inFile readl ine():				
	while (line != null) {				
	outFile.write(line):				
	outFile.newLine():				
	System.out.println("The next line is \"" + line + "\""):				
	line = inFile.readLine():				
	}				
	inFile.close();				
	outFile.close():				
1					

	PrintWriter	
PrintWriter i	s another converter for a write st	ream
 Adds print & objects, etc. 	println methods for primitive ty just as we've used for System.c	pes, strings, out
 Does not thr to use) 	ow exceptions (to make it more	convenient
 Optional 2nd output be flu after each pr 	boolean parameter in constructors shed (force all output to actually intln	or to request (appear)
 Useful for in right away 	teractive consoles where messages r	leed to appear







Network Streams

Import java.net.*

7/23/2003

- Use URL to create a name of something on the web
- · Use openStream() method to get a InputStream on the contents of the URL
 - URL url = new URL("http://www.cs.washington.edu/index.html"); InputStream inStream = url.openStream(); ... // now read from inStream
- Use openConnection() and URLConnection methods to get more control
 - URLConnection connection = url.openConnection(); OutputStream outStream = connection.getOutputStream(); ... // now write to outStream (assuming target url allows writing!)
- Socket class for even more flexible network reading & writing

(c) 2001-3, University of Washington

12-37

Other Possible Kinds of Stream Converters

- Compression
- Encryption
- Filtering
- Translation
- Statistics gathering
- · Security monitoring
- Routing/Merging
- Reducing Bandwidth (Size & Detail), e.g. of graphics or sound "lossy compression"

(c) 2001-3, University of Washington

- Noise reduction, image sharpening, ...
- Many, many more...

7/23/2003

12-38

Summary		
• Java stream li	braries	
 Comprehensi a chain 	ve, flexible, easy to compose multiple streams ir	
But hard to de	o simple things	
• What to take a	away	
BufferedRead	er and readLine() for text input	
PrintWriter an	d print()/println() for text output	
Look for end	of file	
JFileChooser	to select files when opening	
 close() when 	done	