

CS 683 Emerging Technologies  
Fall Semester, 2005  
Doc 20 Ruby IO & Threads  
Nov 9, 2005

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## References

Programming Ruby, The Pragmatic Programmers' Guide, Dave Thomas, ISBN 0-9745140-5-5

Some examples in this lecture are from the above text

# IO

```
file = File.open('testFile')
while line = file.gets
  puts line
end
file.close
```

```
File.open('testFile') do |file|
  while line = file.gets
    puts line
  end
end
```

```
File.open('testFile') do |file|
  file.each_line {|line| puts line}
end
```

```
IO.foreach('testFile') {|line| puts line}
```

```
puts IO.readlines('testFile')
```

```
array = IO.readlines('testFile')
```

```
mode = 'a'
File.open('testFile', mode) do |file|
  file.print 'cat'
  file.puts 'dog'
  file.puts 5
end
```

```
File.open('testFile', mode) do |file|
  file << 'cat' << "dog\n" << 5 << "\n"
end
```

r	read-only, start at beginning of file
r+	read/write, start at beginning of file
w	write-only, start at beginning of file
w+	read/write, start at beginning of file
a	write-only, append to end of file
a+	read/write, start at end of file
b	Binary mode, Windows only, combine with above

# Threads

```
require 'net/http'

pages = %w{ www.eli.sdsu.edu www.google.com slashdot.org}
threads = []

for page_to_fetch in pages
  threads << Thread.new(page_to_fetch) do |url|
    browser = Net::HTTP.new(url, 80)
    puts "Fetching #{url}"
    response = browser.get('/', nil)
    puts "Got #{url}: #{response.message}"
  end
end
threads.each {|thread| thread.join }
```

Fetching www.eli.sdsu.eduFetching www.google.comFetching slashdot.org

Got www.eli.sdsu.edu: OK  
Got www.google.com: OK  
Got slashdot.org: OK