

# Learning Ruby - 8

Exploiting Libraries

# Ruby's Built-in Libraries

- There's a large collection of standard libraries provided with Ruby
- *The PickAxe* provides a comprehensive survey of what's available
- The Internet hosts a number of Ruby Library Repositories, with **The Ruby Application Archive** (RAA) and **RubyForge** the most popular
- The move is on to use **RubyGems** as the standard library management tool
- Don't reinvent the wheel (life is far too short) - use Ruby libraries whenever you can

# Example Library - Base64

```
require 'base64' # Conforms with RFC 2045.

input = "Let us turn our thoughts today\n" +
        "To Martin Luther King\n" +
        "And recognize that there are ties between us"

puts e_input = Base64.encode64( input )

puts Base64.decode64( e_input )
```

# Example Library - Date

```
require 'date'

dt = Date.new( 2006, 9, 21 )

puts dt.to_s
puts "The month is " + dt.month.to_s
puts "This is the " + dt.yday.to_s + "th day of the year"

dt2 = DateTime.new( 2006, 9, 21 )
puts "It was a #{dt2.strftime( '%A' )} when you " +
      "started learning Ruby."
```

# Example Library - Digests

```
require 'digest/md5'  
require 'digest/sha1'  
  
input = "Let us turn our thoughts today\n" +  
        "To Martin Luther King\n" +  
        "And recognize that there are ties between us"  
  
puts "MD5: " + Digest::MD5.hexdigest( input )  
puts "SHA1: " + Digest::SHA1.hexdigest( input )
```

# Example Library - Find

```
require 'find'

Find.find( "/home/barryp/ruby/bin" ) do |fh|
  print "\t#{fh}\n"
end # of do.
```

# Example Library - Readline

```
require 'readline'  
  
input = Readline::readline( "Gimme some: ", true )  
  
puts input  
  
input = Readline::readline( "Gimme some more: ", true )  
  
puts input
```

# Example Library - Readline (again)

```
require 'readline'
```

```
include Readline
```

```
input = readline( "Gimme some: ", true )
```

```
puts input
```

```
input = readline( "Gimme some more: ", true )
```

```
puts input
```



# Example Libraries - Windows

```
require 'Win32API'
```

```
# Do your worst ...
```

```
require 'win32ole'
```

```
browser = WIN32OLE.new( "Firefox.Application" )
```

```
browser.visible
```

```
browser.navigate( "http://www.google.com" )
```

# Example Library - Zlib

```
require 'zlib'
```

```
Zlib::GzipWriter.open( "ruby.gz" ) do |chunk|  
  chunk.write( File.read( "ruby.data.txt" ) )  
end # of do.
```

```
require 'zlib'
```

```
File.open( "ruby.gz" ) do |fh|  
  gzip = Zlib::GzipReader.new( fh )  
  chunk = gzip.read.split( /\n/ )  
  puts chunk  
end # of do.
```

# More ... Ruby So Far

- Get to know the standard libraries
- Get to know the on-line repositories
- Reuse whenever possible
- Share your work with others - upload your libraries to the repositories