

Ruby Explorations 0

Mark Keane...CSI...UCD

Mixed delivery



This Week's Goals

1. To have all the software properly installed
...and running properly
2. To agree a standard build (sort of)
3. To have a (fairly) standard environment
4. Understand difference between ***ruby*** and ***irb***



The Course

Learning by Doing...

- Lectures are available on Moodle; work through at your own pace but with open laptop
- Practical (4 over the semester, clinics for guidance, see timetable) with very open laptop
- Practical work may be self-paced but would advise you to stick to the recommended submission dates with submissions via moodle (do not fall behind)
- Practical is like a drop-in clinic; MTK and handsome pals are available for advice

Assessment: Exam

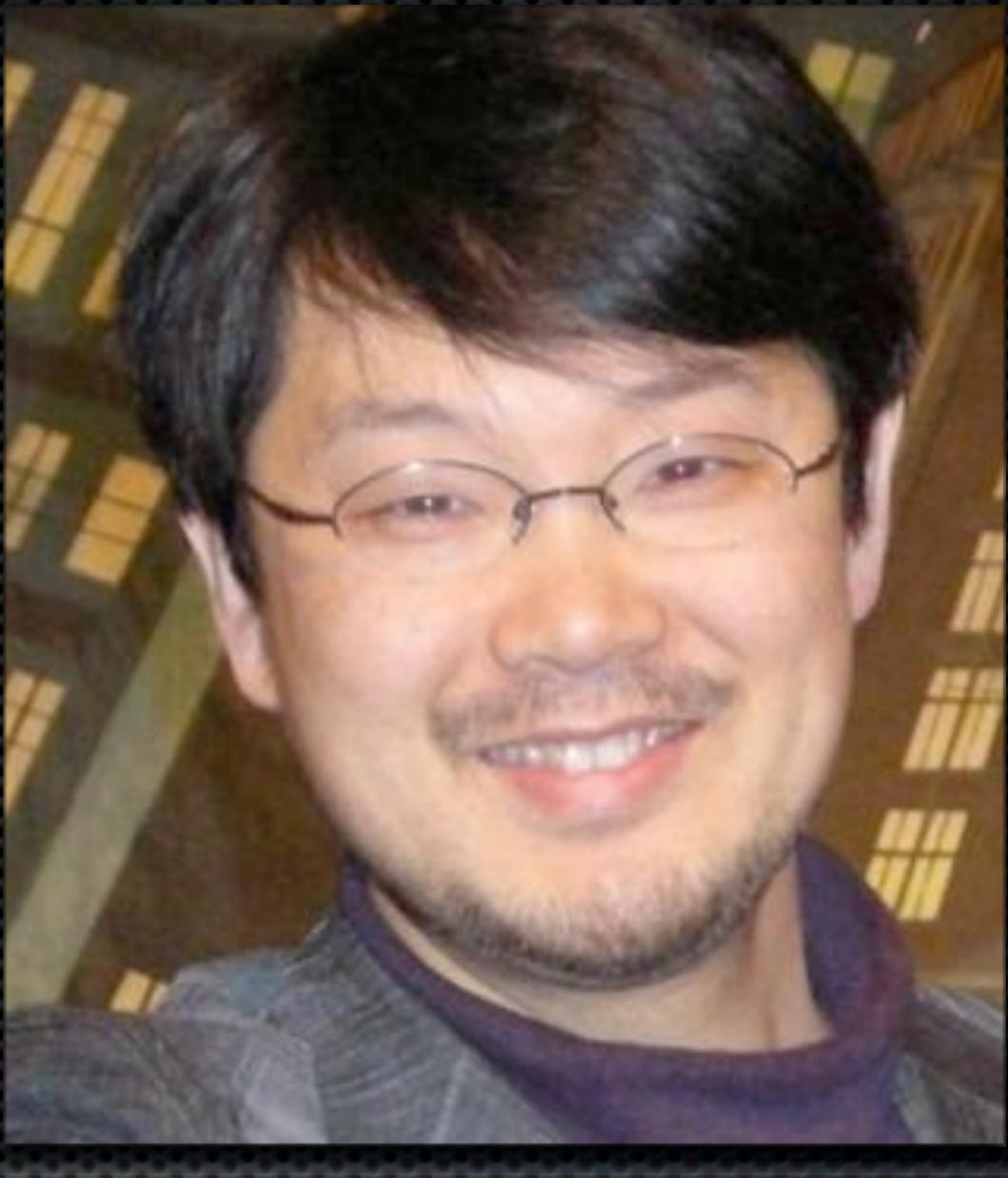
- Examined by:
 - **Formal Written Exam (100%)**
- Coursework:
 - There are 10 weekly practical pieces of work to do
 - Marked as pass/fail with feedback
 - They do **NOT** contribute to assessment but are there to guide and aid you in learning the language

A Word on Plagiarism

- Plagiarism is NOT an option
- Important to help each other and use the group for advice but that is not the same as copying
- Remember, copyier and copyee are treated equally
- Outcomes vary, from zeroing of assignments up to expulsion from course

Ruby History

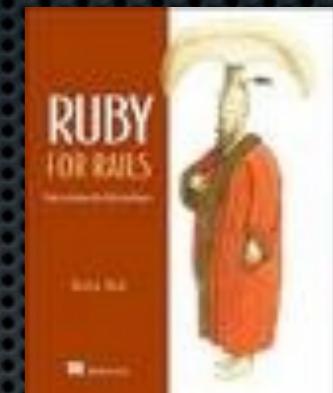
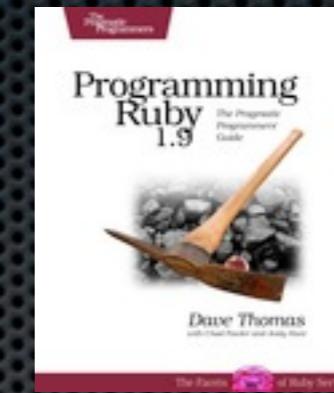
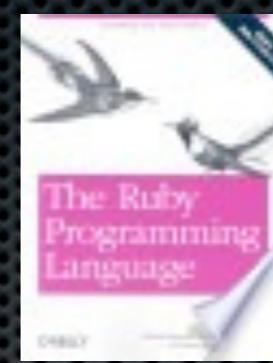
- created by Yukihiro Matsumoto in 1993
- a language balancing functional and imperative programming
- Tubular Bells of programming...



Flanagan, D & Matsumoto, Y. (2008).
The Ruby Programming Language. O'Reilly.

Installation Summary

Summary Ruby



- <http://www.ruby-lang.org/en/downloads/> for all
 - directions for Windows, MacOSX (bundled or use macports, nb XCode) and Linux (see Thomas , 2009, chapter 1)
- we will all use **Ruby 2.3.x**
- **basically**, use a text editor to write files, a cshell to run files and navigate directories (or ruby2.3 if multiples)
 - ▶ ruby finename.rb [runs the file called *filename*]
 - ▶ irb [gets you the interactive version]

Now Let's Do it in Steps...

Ruby Downloads (PC)

- <http://rubyforge.org/>
 - Please use 2.3 (for overall compatibility)
- <http://www.ruby-lang.org/en/downloads/>
 - General directions for 2.3
- <http://rubyinstaller.org/>
 - One-click installer for 2.3
 - NB: There are 32-bit and 64-bit versions



Ruby

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Ruby is...

A dynamic, open source programming language with a focus on simplicity and productivity. It has an elegant syntax that is natural to read and easy to write.

 Download Ruby

or [Read More...](#)

```
# Ruby knows what you
# mean, even if you
# want to do math on
# an entire Array
cities = %w[ London
              Oslo
              Paris
              Amsterdam
              Berlin ]
visited = %w[Berlin Oslo]

puts "I still need " +
      "to visit the " +
      "following cities:",
      cities - visited
```

RubyConf Taiwan 2015 Registration Online

RubyConf Taiwan 2015 will be held in Taipei, Taiwan on 11-12 September, 2015.

[Continue Reading...](#)

Posted by Mu-Fan Teng (@ryudoawaru) on 4 Aug 2015

Get Started, it's easy!

[Try Ruby! \(in your browser\)](#)

[Ruby in Twenty Minutes](#)

[Ruby from Other
Languages](#)



The easy way to install Ruby on Windows

This is a **self-contained Windows-based installer** that includes the **Ruby language**, an execution environment, important **documentation**, and more.

[Download](#)[Add-ons](#)

Latest News

RubyInstaller 2.1.9, 2.2.5, and 2.3.1 released

Sorry it has taken so long to get these releases out. You can find links to download these versions in the [Downloads section](#) of this site or on [Bintray](#).

July 18, 2016

[Read full article](#)

RubyInstaller 2.0.0-p648, 2.1.8 and 2.2.4 released

These new releases of Ruby address a security issue ([CVE-2015-7551](#)). 2.1.8 and 2.2.4 also address some bugs and fixes. Upgrading to those versions is recommended. You can find the links to those archives in the download section.

February 04, 2016

[Read full article](#)

RubyInstaller 2.0.0-p645, 2.1.6 and 2.2.2 released

These new releases of Ruby address a security issue ([CVE-2015-1855](#)). 2.1.6 and 2.2.2 also address some bugs and fixes. Upgrading to those versions is recommended. You can find the

Extras

Online Ruby Programming Course

If you're new to Ruby, check out this online course from The Pragmatic Studio to learn all the fundamentals of object-oriented programming with Ruby.

Online Rails Programming Course

If you're looking to create Ruby on Rails web apps, you'll learn how to build a complete Rails 4 app step-by-step in this online course also from The Pragmatic Studio.



Ruby

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Download Ruby

Here you can get the latest Ruby distributions in your favorite flavor. The current stable version is 2.3.1. Please be sure to read [Ruby's License](#).

Ways of Installing Ruby

We have several tools on each major platform to install Ruby:

- On Linux/UNIX, you can use the package management system of your distribution or third-party tools (rbenv and RVM).
- On OS X machines, you can use third-party tools (rbenv and RVM).
- On Windows machines, you can use RubyInstaller.

See the [Installation](#) page for details on using package management systems or third-party tools.

Of course, you can also install Ruby from source on all major platforms.

Compiling Ruby — Source Code

Installing from the source code is a great solution for when you are comfortable enough with your platform and perhaps need specific settings for your environment. It's also a good solution in the event that there are no other premade packages for your platform.

See the [Installation](#) page for details on building Ruby from source. If you have an issue compiling Ruby, consider using one of the third party tools mentioned above. They may help you.

• Stable releases:

- [Ruby 2.3.1](#)
sha256:
b87c738cb2032bf4920fef8e3864dc5cf8eae9d89d8d523ce0236945c7
97dec
- [Ruby 2.2.5](#)
sha256:

Get Started, it's easy!

[Try Ruby! \(in your browser\)](#)
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Participate in a friendly and growing community.

[Mailing Lists](#): Talk about Ruby with programmers from all around the world.
[User Groups](#): Get in contact with Rubyists in your area.
[Weblogs](#): Read about what's happening right now in the Ruby community.

[Ruby Core](#): Help polish the rough edges of the latest Ruby.

[Issue Tracking](#): Report or help solve issues in Ruby.

Syndicate

[Recent News \(RSS\)](#)

Ruby Downloads (Mac)

- <http://www.ruby-lang.org/en/downloads/>
- Mac OSX Lions came with 1.8.7
- Mac OSX Sierra came with 2.0.0
- **MUST use Ruby 2.3 (was last most stable...)**
- See Handout on details
- NB; RAILS maps differently onto different RUBY versions

Mammy, what have I done ?

Checking Versions

- Open a command-line window and check !

Last login: Tue Aug 28 15:13:36 on ttys000

```
Marks-MacBook-Pro:~ mkeane$ ruby -v  
ruby 2.3.1p112 (2016-04-26 revision 54768) [x86_64-darwin15]
```

```
Marks-MacBook-Pro:~ mkeane$ ruby2.0 -v  
ruby 2.0.0p481 (2013-06-27 revision 41674) [x86_64-darwin12]  
*** if old version is still there ***
```

```
Marks-MacBook-Pro:~ mkeane$ gem -v  
2.6.7
```

Downloads (Gems)

- Ruby comes with libraries, called Ruby Gems
- A standard gem package will come with most installs
- Hence:

```
[Mouseking6-3:~] markkean$ gem -v  
2.6.7
```
- You can look at your collection of gems using *gem list*

*** LOCAL GEMS ***

abstract (1.0.0)
actionmailer (3.1.0, 3.0.1)
actionpack (3.1.0, 3.0.1)
activemodel (3.1.0, 3.0.1)
activerecord (3.1.0, 3.0.1, 2.3.3)
activeresource (3.1.0, 3.0.1)
activesupport (3.1.0, 3.0.1, 2.3.3)
addressable (2.2.6)
ansi (1.3.0)
archive-tar-minitar (0.5.2)
arel (2.2.1, 1.0.1)
bcrypt-ruby (3.0.1)
builder (3.0.0, 2.1.2)
bundler (1.0.18)
capistrano (2.9.0)
coffee-rails (3.1.1)
coffee-script (2.2.0)
coffee-script-source (1.1.2)
columnize (0.3.4)
distance_measures (0.0.6)
em-http-request (1.0.0)
em-socksify (0.1.0)
erubis (2.7.0, 2.6.6)
eventmachine (1.0.0.beta.4, 0.12.10)
execjs (1.2.9)
highline (1.6.2)
hike (1.2.1)
http_parser.rb (0.5.2)
i18n (0.6.0, 0.4.2)
jquery-rails (1.0.14)
json (1.6.1)
k_means (0.0.7)
linecache19 (0.5.12)
mail (2.3.0, 2.2.9)
mime-types (1.16)
minitest (2.6.0, 1.6.0)
multi_json (1.0.3)
net-scp (1.0.4)
net-sftp (2.0.5)
net-ssh (2.2.1)

defaults to
most recent

do this...

Marks-MacBook-Pro:~ mkeane\$ gem update
Updating installed gems
Updating actionmailer
ERROR: While executing gem ... (Gem::FilePermissionError)

You don't have write permissions into the /opt/local/lib/ruby1.9/gems/1.9.1 directory.

Marks-MacBook-Pro:~ mkeane\$ sudo gem update
To proceed, enter your password, or type Ctrl-C to abort.

Password:
Updating installed gems
Updating actionmailer
Successfully installed activesupport-3.2.8
Successfully installed activemodel-3.2.8
...

A World of Pain (Gems)

- Gems libraries may be stored in different places
- Mac OSX (unix) versions and gems may be stored in local directories or “higher” system applications dirs
- Sometimes, you load a gem, you list it but then when you try to use it says “FU, Gem does not exist...”
- Problem can often be gems stored in different places; can be very frustrating if occurs (avoid by clean installs)



will
cause
bugs

Geek Crap I: Search Paths

- Move along, there is nothing to see here....
- Ruby uses many environmental variables to store search paths and the like... under the bonnet

```
MacBook-Air-2:~ user$ ruby -e 'puts $LOAD_PATH'  
/opt/local/lib/ruby2.3/gems/2.3.0/gems/did_you_mean-1.0.0/lib  
/opt/local/lib/ruby2.3/site_ruby/2.3.0  
/opt/local/lib/ruby2.3/site_ruby/2.3.0/x86_64-darwin15  
/opt/local/lib/ruby2.3/site_ruby  
/opt/local/lib/ruby2.3/vendor_ruby/2.3.0  
/opt/local/lib/ruby2.3/vendor_ruby/2.3.0/x86_64-darwin15  
/opt/local/lib/ruby2.3/vendor_ruby  
/opt/local/lib/ruby2.3/2.3.0  
/opt/local/lib/ruby2.3/2.3.0/x86_64-darwin15
```

Geek Crap II: Search Paths

- BUT...if I check my other version of Ruby

```
Marks-MacBook-Pro:~ mkeane$ ruby1.8 -e 'puts $LOAD_PATH'  
/Library/Ruby/Site/1.8  
/Library/Ruby/Site/1.8/powerpc-darwin12.0  
/Library/Ruby/Site/1.8/universal-darwin12.0  
/Library/Ruby/Site  
/System/Library/Frameworks/Ruby.framework/Versions/1.8/usr/lib/ruby/vendor_ruby/1.8  
/System/Library/Frameworks/Ruby.framework/Versions/1.8/usr/lib/ruby/vendor_ruby/1.8/  
universal-darwin12.0  
/System/Library/Frameworks/Ruby.framework/Versions/1.8/usr/lib/ruby/vendor_ruby  
/System/Library/Frameworks/Ruby.framework/Versions/1.8/usr/lib/ruby/1.8  
/System/Library/Frameworks/Ruby.framework/Versions/1.8/usr/lib/ruby/1.8/powerpc-darwin12.0  
/System/Library/Frameworks/Ruby.framework/Versions/1.8/usr/lib/ruby/1.8/universal-darwin12.0  
.
```

YOU...

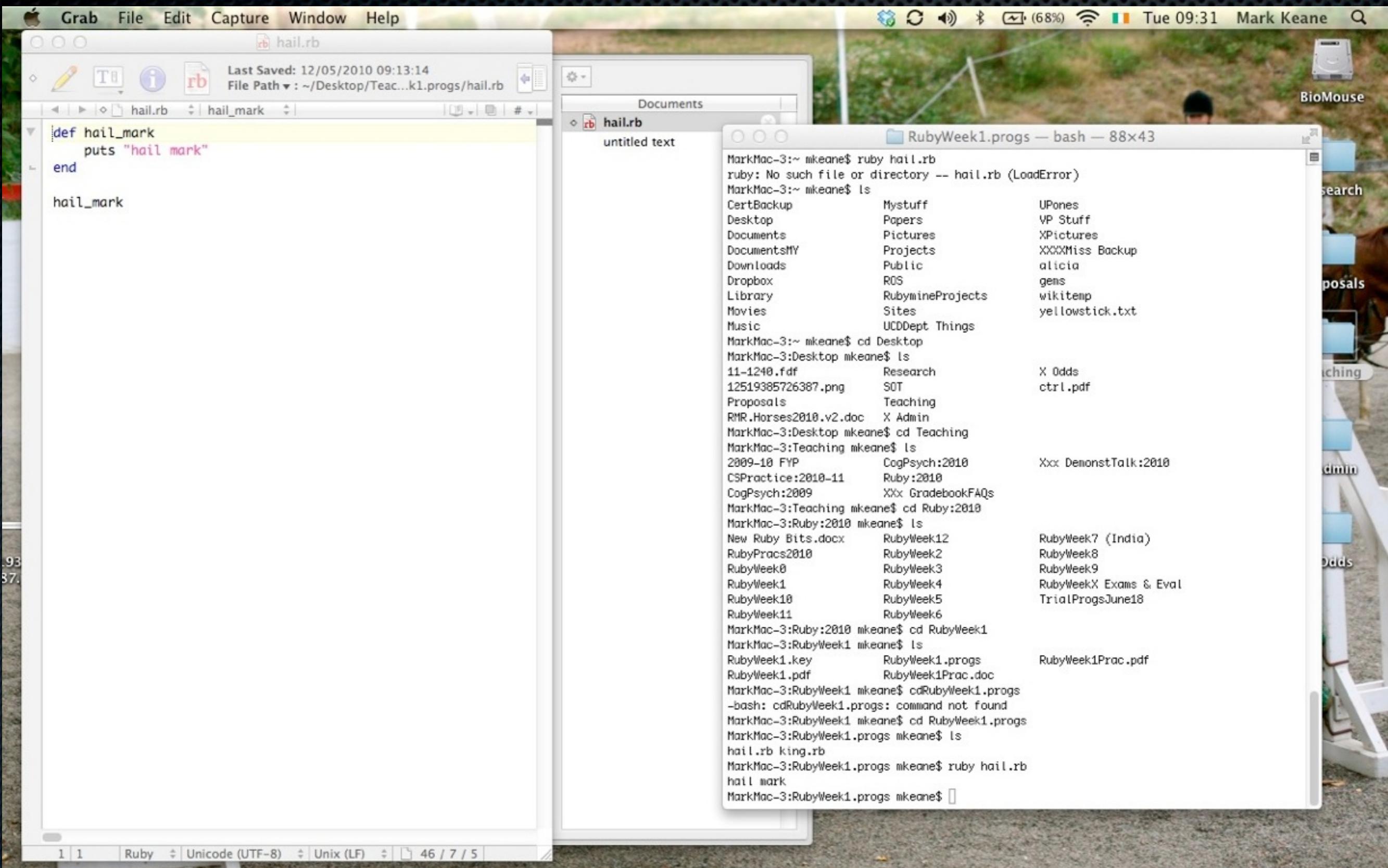


Are now ready to go...

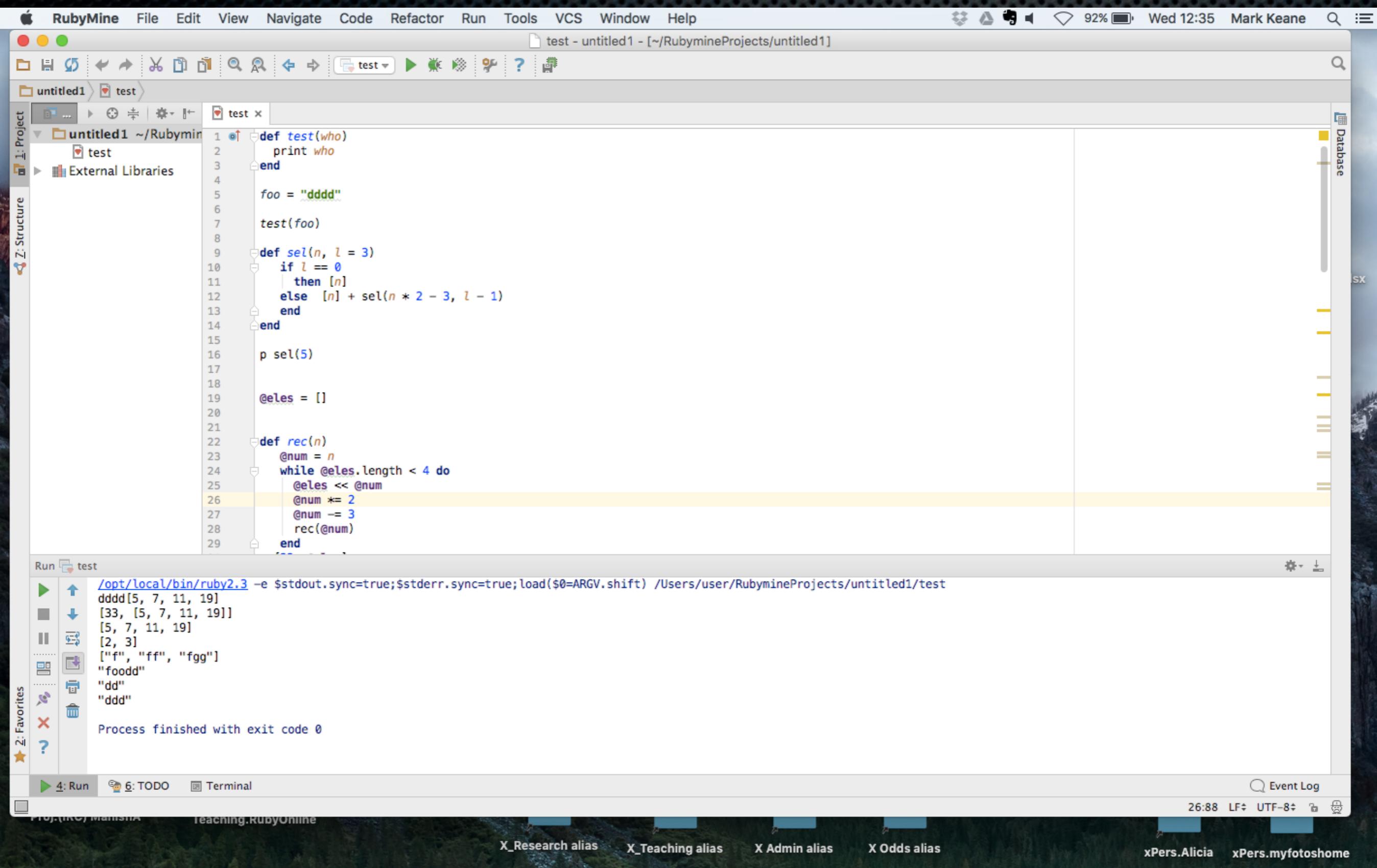
Set Up Your Environment

- We support the ?bear/bare? minimum:
 - Command-line window terminal
 - Text editor of your choice (e.g., Textwrangler, PC?)
- Fancier options exist:
 - Xcode, RubyMine for Macs
 - RDE Ruby IDE, RubyMine for PCs
- But, they are your own business; start with basics

My Old Environment



My Environment (fancier)



The screenshot shows the Rubymine IDE interface. The top menu bar includes RubyMine, File, Edit, View, Navigate, Code, Refactor, Run, Tools, VCS, Window, and Help. The status bar at the top right shows battery level (92%), time (Wed 12:35), and user name (Mark Keane). The bottom status bar shows various system icons and the current terminal session (xPers.Alicia).

The main window displays a Ruby script named `test` in the `untitled1` project. The code defines three methods: `test`, `sel`, and `rec`. The `rec` method is currently being run, as indicated by the yellow highlighting of its code in the editor.

```
1  def test(who)
2    print who
3  end
4
5  foo = "dddd"
6
7  test(foo)
8
9  def sel(n, l = 3)
10   if l == 0
11     then [n]
12   else [n] + sel(n * 2 - 3, l - 1)
13   end
14 end
15
16 p sel(5)
17
18
19 @eles = []
20
21
22 def rec(n)
23   @num = n
24   while @eles.length < 4 do
25     @eles << @num
26     @num *= 2
27     @num -= 3
28     rec(@num)
29   end
30
```

The Run tool window at the bottom shows the command run and its output:

```
/opt/local/bin/ruby2.3 -e $stdout.sync=true;$stderr.sync=true;load($0=ARGV.shift) /Users/user/RubymineProjects/untitled1/test
dddd[5, 7, 11, 19]
[33, [5, 7, 11, 19]]
[5, 7, 11, 19]
[2, 3]
["f", "ff", "fgg"]
"foodd"
"dd"
"ddd"

Process finished with exit code 0
```

The Favorites sidebar on the left contains icons for Run, Favorites, TODO, Terminal, and Event Log.



Now, lets use it !

Open a file...

- Write this in a simple text file, called ***hail.rb***:

```
def hail_mark  
  puts "hail mark"  
end
```

hail_mark

hail.rb

Open your Terminal...

- Move to the directory in which the file sits...

```
markkean$ cd RubyWeek1
```

markkean\$ ls	RubyWeek1.progs	RubyWeek1Prac.pdf
RubyWeek1.key	RubyWeek1Prac.doc	
RubyWeek1.pdf		

```
markkean$ cd RubyWeek1.progs
```

```
markkean$ ls
```



```
hail.rb  king.rb
```

```
markkean$ more hail.rb
```



```
def hail_mark
    puts "hail mark"
end
```

```
hail_mark
```

```
markkean$ ruby hail.rb
```



```
hail mark
```

```
markkean$
```

Well done !



Final Word

Running Ruby Two Ways

- Ruby can be used in two ways...

1. Invoke the ruby interpreter with **ruby** command
2. Invoke a ruby shell with **irb** command, to be interactive

- Running a file with **ruby** (we have just seen)

markkean\$ ruby hail.rb

hail mark

filename

output when file is executed by ruby

- Interactively, you use **irb** and the type in expressions (see next page)

Running Ruby The 2nd Way

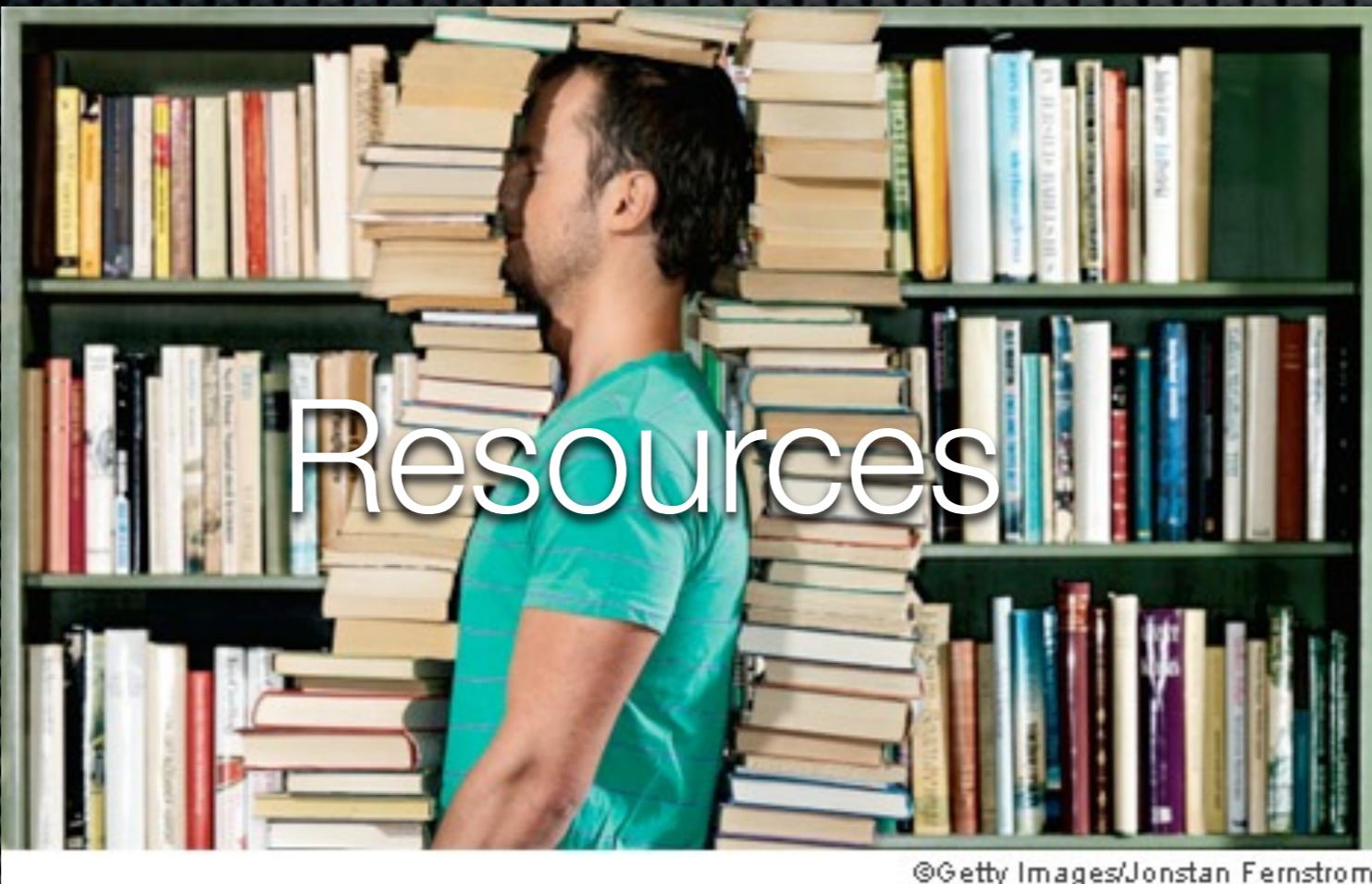
- Call the ruby shell using **irb**:

```
markkean$ irb
>> "foo"
=> "foo"
>> puts "hail mark"
hail mark
=> nil
>> def hail_mark
>> puts "hail mark"
>> end
=> nil
>> hail_mark
hail mark
=> nil
>> quit
markkean$
```

every expression returns a value

awkward way to define a method

after a method does its thing, it returns nil



©Getty Images/Jonstan Fernstrom

Resources |: <http://www.ruby-doc.org/core/>

The screenshot shows a web browser window with the title "RDoc Documentation [ruby-doc.org]" at the top. The address bar contains the URL "http://www.ruby-doc.org/core/". Below the address bar is a navigation bar with links to "Most Visited", "Finance", "Home&Abroad", "Popular", "Wikis", "Hacking", "Health&Exer", "Net&Functions", "Wikis", "Latest Headlines", and "InstallUniversity.co...". There are also tabs for "Collapso", "RubyForge: Ruby Installer for ...", and the current document "RDoc Documentation [ruby-doc.org]".

The main content area displays the RDoc documentation for the `String` class. It includes:

- Files:** array.c, bignum.c, class.c, compar.c, compile.c, complex.c, cont.c, debug.c, dir.c, ...
- Signal**
- Methods:**
 - !~ (Object)
 - % (Fixnum)
 - % (Numeric)
 - % (Bignum)
 - % (String)
 - % (Float)
 - & (Bignum)
 - & (NilClass)
 - & (FalseClass)
- Class:** `String`
- In:** string.c
- Ruby version:**
- A description: A `String` object holds and manipulates an arbitrary sequence of `bytes`, typically representing characters. `String` objects may be created using `string::new` or as literals.
- Text: Because of aliasing issues, users of strings should be aware of the methods that modify the contents of a `String` object. Typically, methods with names ending in ``!'' modify their receiver, while those without a ``!'' return a `new String`. However, there are exceptions, such as `String#[]=`.
- Methods:** A long list of methods including: %, *, +, <<, <=~, ==, ===, =~, [], [], =~, ascii_only?, bytes, bytesize, capitalize, capitalize!,casecmp, center, chars, chomp, chomp!, chop, chop!, chr, clear, codepoints, concat, count, crypt, delete, delete!, downcase, downcase!, dump, each_byte, each_char, each_codepoint, each_line, empty?, encode, encode!, encoding, end_with?, eql?, force_encoding, getbyte, gsub, gsub!, hash, hex, include?, index, initialize_copy, insert, inspect, intern, length, lines, ljust, lstrip, lstrip!, match, new, next, next!, oct, ord, partition, replace, reverse, reverse!, rindex, rjust, rpartition, rstrip, rstrip!, scan, setbyte, size, slice, slice!, split, squeeze!, squeeze!, start_with?, strip, strip!, sub, sub!, succ, succ!, sum, swapcase, swapcase!, to_c, to_f, to_i, to_r, to_s, to_str, to_sym, tr, tr!, tr_s, tr_s!, try_convert, unpack, upcase, upcase!, upto, valid_encoding?
- Included Modules:** Comparable

Resources |: <http://www.ruby-doc.org/core/>

The screenshot shows a web browser window with the following details:

- Address Bar:** ruby-doc.org/core-2.4.0/String.html
- Tab Bar:** Google News, Course: Exploring Ruby (Mixed), Class: String (Ruby 2_4_0), Mark
- Toolbar:** Back, Forward, Stop, Refresh, Home, Bookmarks, Search, etc.
- Menu Bar:** Apps, Home, Current+Crucial, Home&Abroad, Finance, Net&Functions, Google Scholar, Health&Exer, Popular, Hacking, Wikis, Other Bookmarks
- Page Navigation:** Home, Core, Std-lib, Downloads, Search
- Alert Bar:** There were 3 Ruby vulnerability reports in the last 14 days. 3 undetermined. Most recent: CVE-2016-10194. See details.
- Content Area:**
 - In Files:** complex.c, pack.c, rational.c, string.c, transcode.c
 - Parent:** Object
 - Methods:** ::new, ::try_convert, #%, #*, #+, #+@, #-, #<<, #<=>, #==, #==@
 - String Section:** A `String` object holds and manipulates an arbitrary sequence of bytes, typically representing characters. `String` objects may be created using `String::new` or as literals. Because of aliasing issues, users of strings should be aware of the methods that modify the contents of a `String` object. Typically, methods with names ending in “!” modify their receiver, while those without a “!” return a new `String`. However, there are exceptions, such as `String#[]=`.
 - Public Class Methods:**
 - `new(str='') → new_str`
 - `new(str='', encoding: enc) → new_str`
 - `new(str='', capacity: size) → new_str`

Returns a new `String` object containing a copy of `str`.

The optional `enc` argument specifies the encoding of the new `String`. If not specified, the encoding of `str` (or ASCII-8BIT, if `str` is not specified) is used.

The optional `size` argument specifies the size of internal buffer. This may improve performance when dealing with large `String` objects, but it can also lead to memory waste if the string ends early.
- Advertisement:** ZenHub — Get more done in GitHub.
- Bottom Right:** Stop wasting hours in JIRA! Get epics, task boards, and more inside GitHub.
- Bottom Right:** ads via Carbon

Resources II: <http://www.ruby-lang.org/>

The screenshot shows a web browser window with the Ruby website loaded. The address bar displays the URL <https://www.ruby-lang.org/en/>. The page features the Ruby logo and the tagline "A PROGRAMMER'S BEST FRIEND". A navigation bar at the top includes links for Downloads, Documentation, Libraries, Community, News, Security, and About Ruby. On the left, there's a section titled "Ruby is..." with a description of Ruby as a dynamic, open source programming language. Below this is a red button labeled "Download Ruby" and a link to "Read More...". On the right, a code snippet illustrates Ruby's syntax:

```
# Ruby knows what you
# mean, even if you
# want to do math on
# an entire Array
cities = %w[ London
              Oslo
              Paris
              Amsterdam
              Berlin ]
visited = %w[Berlin Oslo]

puts "I still need " +
      "to visit the " +
      "following cities:",
      cities - visited
```

At the bottom, there are two calls-to-action: "RubyConf Taiwan 2015 Registration Online" and "Get Started, it's easy!".

Resources III:

csmoodle.ucd.ie/moodle/

RubyLect1.2017new School of Computer Science - Mark

Secure | https://csmoodle.ucd.ie/moodle/course/index.php

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School of Computer Science - Moodle Mark Keane

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CS Moodle 2018-19

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▶ LEVEL 3
▶ LEVEL 4
▶ LEVEL 5
▶ MSc
▶ PhD
▶ Sri Lanka
▶ BDIC

▶ Expand all

type !

click !

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Mark

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CS Moodle 2018-19

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Search results: 1

click !

 COMP47530 Exploring Ruby (2018-19: Mixed Delivery)

Lecturer: [Mark Keane](#)

Mixed delivery self-paced [Ruby](#) course.

Category: [MSc](#)

Search courses Go

Resources III: csmoodle.ucd.ie/moodle/

The screenshot shows a web browser window with the following details:

- Address Bar:** https://csmoodle.ucd.ie/moodle/login/index.php
- Tab Bar:** UCD Connect, Curriculum Management Sy..., Course: COMP47350 Explor..., Class: String (Ruby 2_4_0), CSMOOLDE.UCD.IE: Log in, Mark.
- Toolbar:** Apps, Home, Current+Crucial, Home&Abroad, Finance, Net&Functions, Google Scholar, Health&Exer, Popular, Hacking, Wikis, Other Bookmarks.
- Header:** CSMOOLDE, UCD, CS, My Courses, CSMOOLDE.UCD.IE, Social networks (Twitter, Facebook, Instagram).
- Main Content:**
 - Log in:** Username: mkeane, Password: [REDACTED].
 - Remember username.
 - Log in** button.
 - [Forgotten your username or password?](#)
 - [Cookies must be enabled in your browser](#) (with a help icon).
 - Some courses may allow guest access**.
 - Log in as a guest** button.

Resources III:

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Resources III: That's a Bingo !

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School of Computer Science - Moodle Mark Keane

RubyEx Participants Badges Competencies Grades General 10 September - 16 September 17 September - 23 September 24 September - 30 September 1 October - 7 October 2 October - 14 October

COMP47530 Exploring Ruby (2018-19: Mixed Delivery)

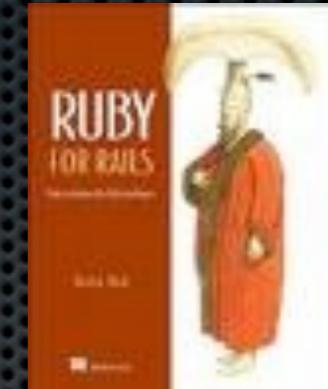
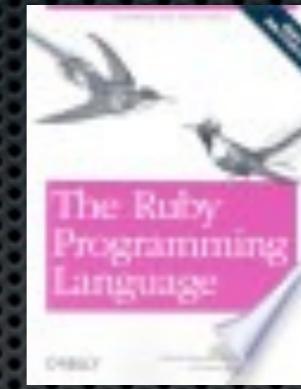
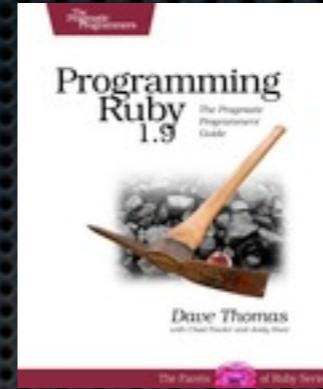
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Announcements

10 September - 16 September

Welcome to the first week of the Exploring Ruby course. Below you will see all the materials and handouts for this first week. Note that there are pdfs of the slides, along with an mp4 of them with a voice-over of the lecture. You can run this voiced-lecture here in Moodle or (if you are on the move) you can connect to a dropbox version of it (via a provided url). Hopefully, this all works well. The main aim of this week is to get ruby installed on your machine and to be ready to start doing your practical work by next week. All the best and happy hunting.

Books



Thomas, D., Fowler, C. & Hunt, A. (2009).
Programming Ruby 1.9. Pragmatic Bookshelf.

Flanagan, D & Matsumoto, Y. (2008).
The Ruby Programming Language. O'Reilly.

mainly for reference !

Black, D.A. (2006). *Ruby for Rails*. Manning.

My Ruby: March 2017

- Ruby 2.3.1 (p112)
- Gem 2.6.7 (see list)
- irb 0.9.6

```
mkeane$ gem list
*** LOCAL GEMS ***
abstract (1.0.0)
actionmailer (3.2.8, 3.1.0, 3.0.1)
actionpack (3.2.8, 3.1.0, 3.0.1)
activemodel (3.2.8, 3.1.0, 3.0.1)
activerecord (3.2.8, 3.1.0, 3.0.1, 2.3.3)
activeresource (3.2.8, 3.1.0, 3.0.1)
activesupport (3.2.8, 3.1.0, 3.0.1, 2.3.3)
addressable (2.3.2, 2.2.6)
ansi (1.4.3, 1.3.0)
archive-tar-minitar (0.5.2)
arel (3.0.2, 2.2.1, 1.0.1)
bcrypt-ruby (3.0.1)
builder (3.0.0, 2.1.2)
bundler (1.1.5, 1.0.18)
capistrano (2.13.3, 2.9.0)
coffee-rails (3.2.2, 3.1.1)
coffee-script (2.2.0)
coffee-script-source (1.3.3, 1.1.2)
columnize (0.3.6, 0.3.4)
distance_measures (0.0.6)
xecjs (1.4.0, 1.2.9)
highline (1.6.14, 1.6.2)
hike (1.2.1)
http_parser.rb (0.5.2)
i18n (0.6.0, 0.4.2)
journey (1.0.4)
json (1.6.1)
k_means (0.0.7)
linecache19 (0.5.12)
mail (2.4.4, 2.3.0, 2.2.9)
mime-types (1.19, 1.16)
minitest (3.3.0, 2.6.0, 1.6.0)
multi_json (1.3.6, 1.0.3)
net-scp (1.0.4)
net-sftp (2.0.5)
net-ssh (2.5.2, 2.2.1)
net-ssh-gateway (1.1.0)
nokogiri (1.5.0)
polyglot (0.3.3, 0.3.2, 0.3.1)
rack (1.4.1, 1.3.4, 1.3.3, 1.2.1)
rack-cache (1.2, 1.1, 1.0.3)
rack-mount (0.8.3, 0.6.13)
rack-ssl (1.3.2)
rack-test (0.6.1, 0.5.6)
rails (3.2.8, 3.1.0, 3.0.1)
railties (3.2.8, 3.1.0, 3.0.1)
rake (0.9.2.2, 0.9.2, 0.8.7)
rdoc (3.12, 3.10, 3.9.4, 2.5.8)
ruby-debug-base19 (0.11.25,
0.11.25.jb2)
ruby-debug-ide (0.4.16)
ruby_core_source (0.1.5)
sass (3.2.1, 3.1.10)
sass-rails (3.2.5, 3.1.4)
sprockets (2.1.3, 2.0.2, 2.0.0)
sqlite3 (1.3.4)
sqlite3-ruby (1.3.3, 1.3.2)
thor (0.16.0, 0.14.6, 0.14.4)
tilt (1.3.3)
treetop (1.4.10, 1.4.8)
turn (0.9.6, 0.8.3)
tzinfo (0.3.33, 0.3.30, 0.3.29, 0.3.23)
uglifier (1.2.7, 1.0.3)
```