Learning Ruby - 12

Grabbag II - The Grabbag Strikes Back!

Testing Code in irb

```
load "~/ruby/pcap/Ethernet.rb"

packet = Ethernet.new( "77777733333399Some Data" )

packet.dest
packet.src
packet.type_len
packet.payload

packet.inspect
packet.methods.sort
```

Less evenmoreless.rb

```
class Person
   attr_reader :name, :dob, :nationality
   attr_writer :name, :dob, :nationality

      ...
```

```
class Person
   attr_accessor :name, :dob, :nationality

      ...
```

Super Inheritance!

```
class RockSong < Song

   def initialize( name, artist, solo, length )

      super( name, artist ) # Initialise the parent.

      @solo = solo
      @length = length

   end # of initialize.

end # of RockSong.
```

Don't addemall, `inject` 'em!

```
def addemall( first, *rest )
   rest.each { |r| first = first + r }
   first
end # of addemall.

a = addemall( 1, 2, 3, 4, 5 )
```

```
b = [1, 2, 3, 4, 5].inject(0) { |sum, num| sum + num }
```

Named Arguments

```
def find_person( params )
   name = params[:name]
   dob = params[:dob] || "unknown"

   # Do yer findin' ... then ...

   puts name + ', born: ' + dob + '.'

end # of find_person.



find_person( :name => 'John Doe', :dob => '24/03/1961' )

find_person( :dob => '12/12/1912', :name => 'Jane Jones' )

find_person( :name => 'Harry Holt' )
```

++ and --

- The 'familiar' ++ and **`--`** operators are NOT in Ruby
- When you want to add 1 to a, use **`a += 1`**
- When you want to take 1 from b, use **`b -= 1`**
- Boo! Hoo! There's no *autoincrement* and *autodecrement* in Ruby!

Things to Remember!

- Variables hold references to objects, not the objects themselves!
- Variables start with a *lowercase* letter, Classes and Constants start with an *UPPERCASE* letter
- Writing code that depends on the existence of the default variable (**$_**) is frowned upon

- Qualifying a loop or condition (to quote *The PickAxe*) is a path that *"leads to the gates of madness"*

The Gates of Madness!!!

```
i = 10

while i < 15
   puts i
   i += 1
end unless i == 11


name = 'Paul'

if name == "Paul"
   puts name
end unless name == "Paul"
```

More ... Ruby So Far

- Be really sure to ignore the code on that last slide!!!!!!!