Monday January 14

Thomas book on-line
to_s
to_i
puts
kernel methods

Programming Ruby 1st Ed

- The first edition of the "pickax book" is available free online
  http://www.ruby-doc.org/docs/ProgrammingRuby
- this is an HTML version "extracted from" the first edition of the book
- covers Ruby 1.6 (the current version is 1.8.6)
- I think (?) there is also a complete version of the book somewhere online

Converting Integers to Strings

- I forgot to include this in the last set of slides....
- You can make a string from an integer by calling the integer's to_s method
  - to_s stands for "to string"
- Examples:
  ```ruby
  >> n = 26
  => 26
  >> n.to_s
  => "26"
  ```
- The Float class also has a method named to_s:
  ```ruby
  >> 3.14159.to_s
  => "3.14159"
  ```
- In fact every class has a to_s method -- more on this later today

Converting Strings to Integers

- The String class has a similar method for doing conversions in the opposite direction
- The to_i method creates an integer from a string of digits
  ```ruby
  >> s = "14"
  => "14"
  >> s.to_i
  => 14
  >> s + 24
  TypeError: can't convert Fix
  >> s.to_i + 24
  => 38
  ```
- What do you think will happen if the string contains characters that are not digits?
Printing an Object

- The `puts` method prints a string on the terminal
- We've seen it in action using String objects
  ```ruby
  => puts "Hello, World"
  Hello, World
  => nil
  => puts 2 * 13
  26
  => nil
  ```
- You call `puts` with any kind of object
- If the object is not a string, `puts` will call the object's `to_s` method to make a string and then print that string

Kernel Methods

- In the previous slides we saw that methods belong to a class
- Methods operate on objects
  - `13 * 2` invokes the `*` method of the Fixnum class
  - "hoy" * 2 invokes the `*` method of the String class
- So what object is `puts` working with?
- Answer: the "kernel"
  - the kernel is the main Ruby interpreter, the thing that executes your program
- Kernel methods are always available in every context
  - we will see a few other kernel methods in the next set of slides