

Standard Types

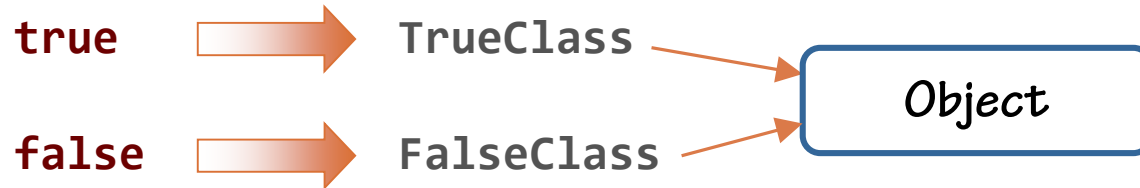
Ruby Fundamentals



Overview

- **Booleans**
- **Integer and floating point numbers**
- **Regular expressions**
- **Strings**
- **Symbols**
- **Arrays and hashes**
- **Ranges**
- **Parallel assignment**

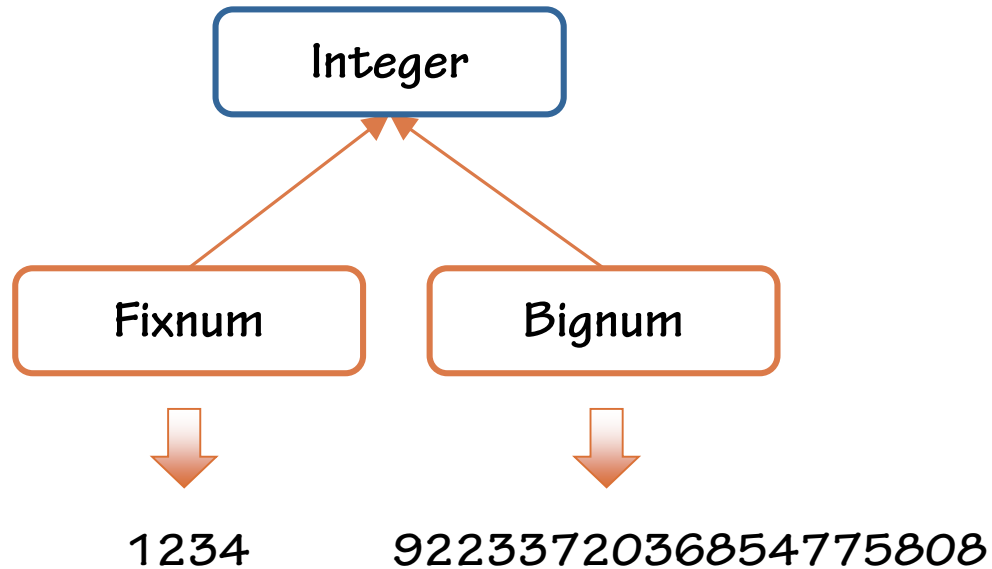
Booleans



`true.to_s` `# "true"`

`false.nil?` `# false`

Integer Numbers



`0xAF` `# decimal 175`
`010` `# decimal 8`
`0o10` `# decimal 8`
`0d175` `# decimal 175`
`0b1010` `# decimal 10`

`100_999`
`0b1010_1111_0110`

Floating Point Numbers

Float



1.234

1.0e3




Strings

'Serenity'	➡	Serenity
'\'Serenity\''	➡	'Serenity'
'Backslash: \\'	➡	Backslash: \

%q('Serenity' transport)	➡	'Serenity' transport
%q['Serenity' transport]		
%q{'Serenity' transport}		
%q<'Serenity' transport>		

%q*'Serenity' transport*
%q/'Serenity' transport/

Strings

<code>\n</code>		<code>newline</code>
<code>\t</code>		<code>tab</code>
<code>\"</code>		<code>double quote</code>

<code>\100</code> <code>\x40</code>		<code>@</code>
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<code>\u20ac</code>		<code>€</code>
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<code>\u{20ac a3 e3f}</code>		<code>€£¥</code>
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Strings

```
lander_count = 10
probe_count = 20
puts "Lander count: #{lander_count}"
puts "Total units: #{lander_count + probe_count}"
```

```
%Q("Serenity" transport)
%*"Serenity" transport*
```


Strings

```
message = <<EOS  
  There's no place I can be  
  since I found serenity  
EOS
```

```
message = <<-EOS  
  There's no place I can be  
  since I found serenity  
EOS
```

Regular Expressions

- Ruby Regexp class docs: <http://ruby-doc.org/core-2.0/Regexp.html>
- Regex test tool: <http://rubular.com/>

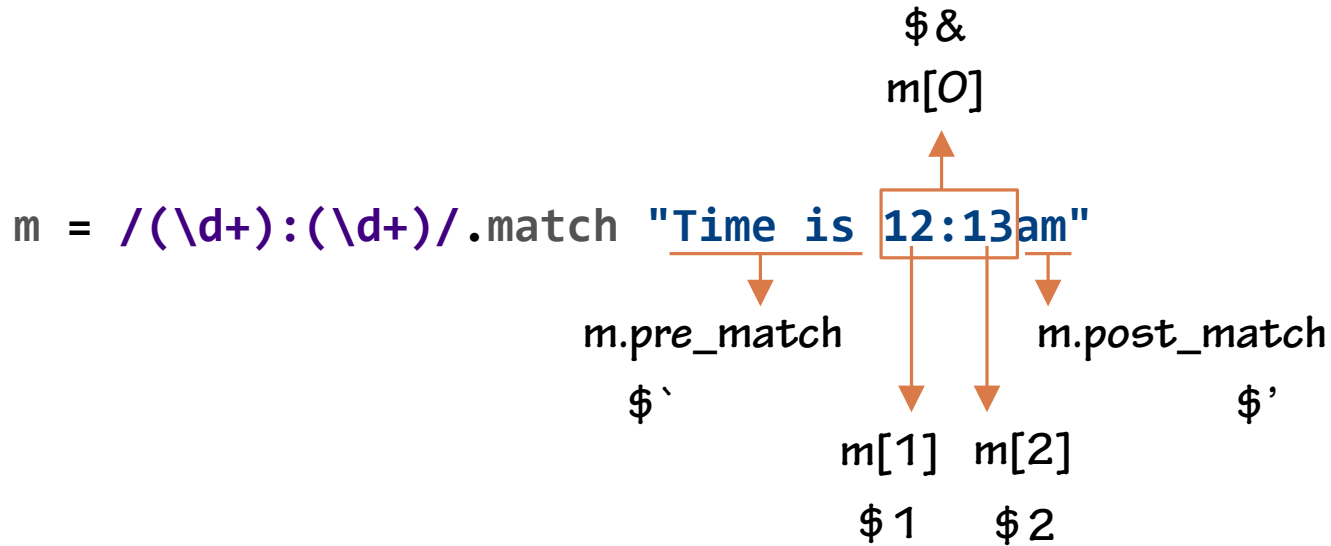
Regular Expressions

Regexp

`/(\d+:\d+)(am|pm)/`

`%r(\d+/\d+)`

Regular Expressions



Symbols

```
attr_accessor :destination  
private :batten_hatches
```

Symbol

```
: "abc"  
: "3"
```

```
direction = "west"  
: "turn_#{direction}" # :turn_west
```

```
traverse_tree(:depth_first)
```

Arrays

Array

[1, 2, 3]

[1, "Z", Object.new]

Enumerable

Hashes

Hash

```
h = {}
```

```
h = {"min" => 0, "max" => 100}
```

```
h = {min: 0, max: 100}
```


Ranges

Range

```
1..5    # [1, 5]
```

```
1...5   # [1, 5)
```

```
puts case sample_reading
      when 0..100 then "below normal"
      when 101..150 then "normal"
      else "excessive"
      end
```

Parallel Assignment and the Splat Operator

```
a, b = 1, 2          # a == 1, b == 2
```

```
a = 1, 2, 3, 4       # a == [1, 2, 3, 4]
```

```
def get_values  
  [1, 2, 3, 4]  
end
```

```
a, b = get_values     # a == 1, b == 2
```

```
first, dummy, dummy, last = get_values
```

```
first, _, _, last = get_values
```

Parallel Assignment and the Splat Operator

```
a, *b = get_values      # a == 1, b == [2, 3, 4]
```

```
a, *b, c = get_values   # a == 1, b == [2, 3], c == 4
```

```
a, b, c = *1..3
```

```
first, _, _, _, last = 1, 2, *[3, 4, 5] # last == 5
```

```
first, *, last = 1, 2, *[3, 4, 5] # last == 5
```

Summary

- **Booleans, numbers, strings**
- **Regular expressions**
- **Symbols**
- **Arrays, hashes, ranges**
- **Enumerable**
- **Parallel assignment and the splat operator**