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# Ruby Monstas



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Session 10

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# Agenda

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- Symbols
- Ranges
- Exercises



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# Symbols

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# How to write a symbol?

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```
irb(main):001:0> :name
```

```
=> :name
```

```
irb(main):002:0> :address
```

```
=> :address
```

```
irb(main):003:0> :any_string
```

```
=> :any_string
```

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# Symbols are like strings, but immutable

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```
irb(main):010:0> puts "hello world".object_id
```

```
280
```

```
=> nil
```

```
irb(main):011:0> puts "hello world".object_id
```

```
880
```

```
=> nil
```

```
irb(main):012:0> puts :"hello world".object_id
```

```
628
```

```
=> nil
```

```
irb(main):013:0> puts :"hello world".object_id
```

```
628
```

```
=> nil
```

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# When to use symbols?

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- The string needn't be changed at runtime.
- The string doesn't need methods of class String.

```
irb(main):001:0> full_names = {
irb(main):002:1* :marion => 'Marion Schleifer',
irb(main):003:1* :fabian => 'Fabian Mettler',
irb(main):004:1* :ferdinand => 'Ferdinand Niedermann',
irb(main):005:1* :thomas => 'Thomas Ritter'
irb(main):006:1> }
=> {:marion=>"Marion Schleifer", :fabian=>"Fabian Mettler", :ferdinand=>"Ferdinand
Niedermann", :thomas=>"Thomas Ritter"}
```

```
irb(main):007:0> full_names[:marion]
=> "Marion Schleifer"
```

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# Ranges

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# What are ranges?

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- Set of values with beginning & end
  - Can be constructed with a type that are comparable with the  $\Leftrightarrow$  operator
    - i.e. integers, floats, doubles, strings etc.
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# How to write a range?

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- `irb(main):003:0> range = (1..9)`  
=> `1..9`
    - Range with numbers from 1 to 9
  - `irb(main):004:0> other_range = (1...9)`  
=> `1...9`
    - Range with numbers from 1 to 8
-

# Methods on ranges

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- begin

```
irb(main):006:0> range.begin
```

```
=> 1
```

- cover?

```
irb(main):007:0> letter_range = ("a".."z")
```

```
=> "a".."z"
```

```
irb(main):008:0> letter_range.cover?("c")
```

```
=> true
```

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# Methods on ranges

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- `to_a`

```
irb(main):009:0> range = (1..9)
```

```
=> 1..9
```

```
irb(main):010:0> range.to_a
```

```
=> [1, 2, 3, 4, 5, 6, 7, 8, 9]
```

```
irb(main):011:0>
```

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# Methods on ranges

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- each

```
irb(main):020:0> range.each do |number|
```

```
irb(main):021:1* print number + 1
```

```
irb(main):022:1> end
```

```
2345678910=> 1..9
```

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# Documentation

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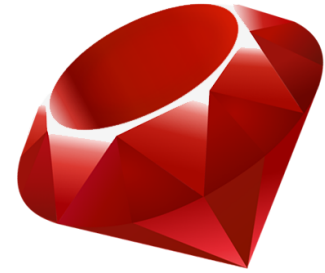
Check out the Ruby documentation for more range methods:

<http://ruby-doc.org/core-2.2.0/Range.html>

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# Time to practice



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Let's get to it!

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