

Please create an account on Github ;)



github.com

Ruby 101



le wagon

@gbs0s



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TA / Backoffice

@ Le Wagon

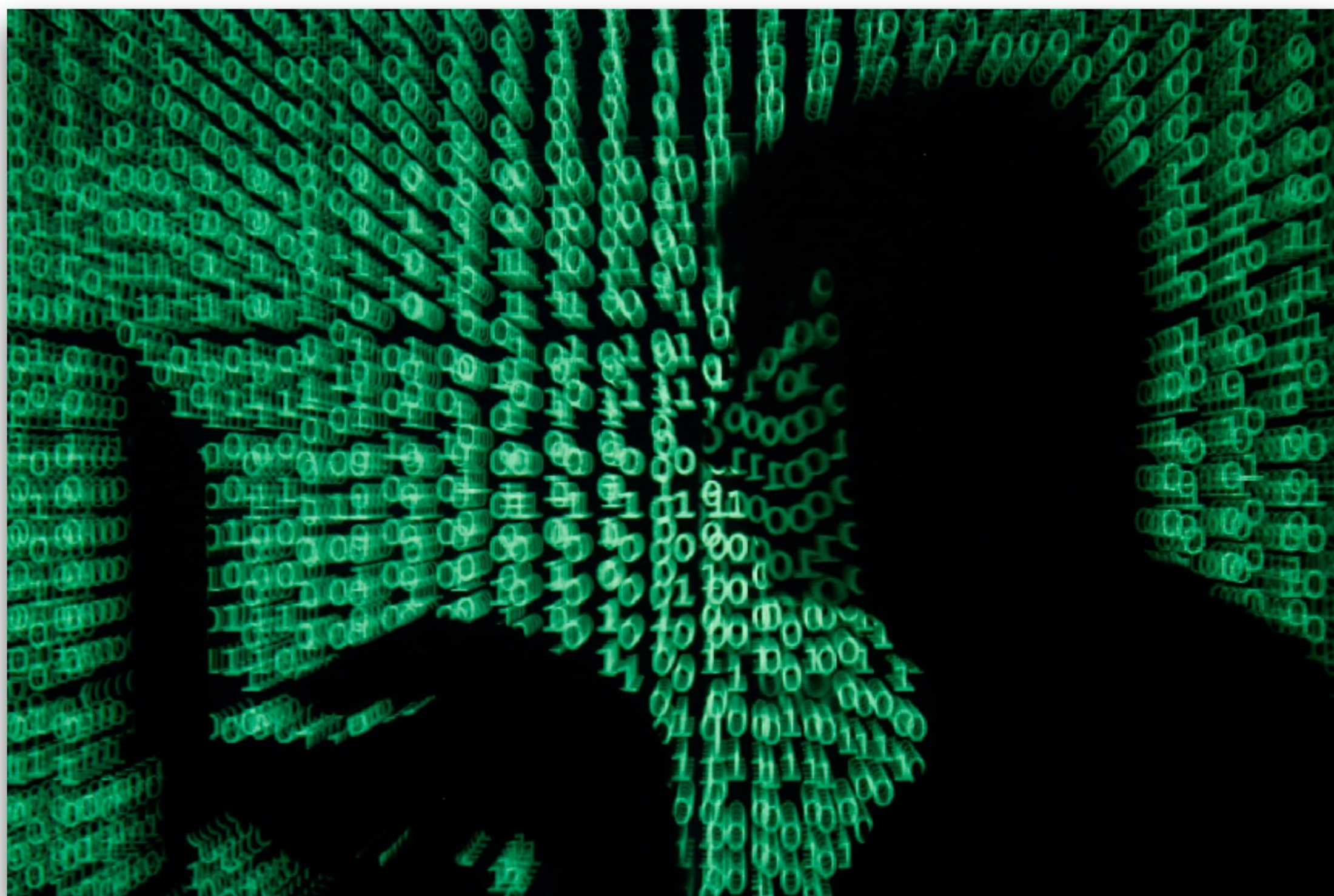


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DATA STRUCTURES AND ALGORITHMS







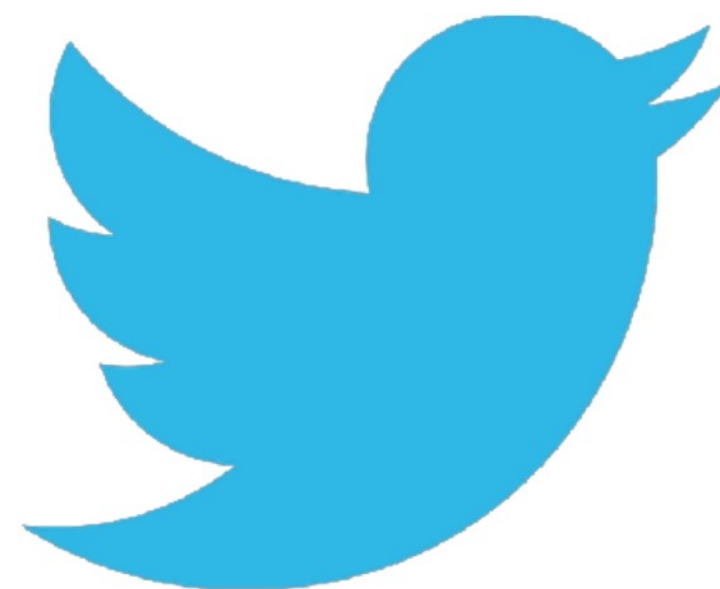
Why Ruby?

JAVA

```
public class HelloWorld {  
  public static void main(String[] args) {  
    System.out.println("Hello, World");  
  }  
}
```

RUBY

```
p "Hello, World"
```

Workshop Outline

Theoretical intros

Basic concepts to understand

Live-code demos

We code, you don't :)

Your turn

Take your time & have fun

Setup



repl.it/languages/ruby



ruby-workshop.lewagon.com/



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Datatypes

String

"John"

"John Lennon plays guitar"

"Hello, World!"

" "

String Methods

`“hello”.uppercase = “HELLO”`

`“HELLO”.downcase = “hello”`

`“hElLo”.capitalize = “Hello”`

`“Hello” + “World” = “HelloWorld”`

`“Hello”.reverse = “olleH”`

Fixnum (Number)

2

42

3, 14

0

Fixnum Methods

$$2 + 2 = 4$$

$$54 - 43 = 11$$

$$5 * 3 = 15$$

$$10 / 2 = 5$$

`1984.to_s = "1984"`

`20.even? = true`

`20.odd? = false`

Boolean

true

false

Boolean Methods

2 == 2 => true

5 > 2 => true

2 == 5 => false

"Hello" == "Hello" => true

"hi" == "HI" => false

"hi" == "HI".downcase => true

2 >= 5 => false

V**ariables**

```
name = "Gabriel"  
    age = 22  
programmer = true
```

Variables

```
first_name = "John"  
last_name = "Lennon"
```

```
full_name = first_name + " " + last_name
```

```
full_name = "#{first_name} #{last_name}"
```

```
full_name => "John Lennon"
```


Repetitive Code...

```
first_name = "John"
last_name = "Lennon"
full_name = "#{first_name} #{last_name}"
full_name => "John Lennon"
```



```
first_name = "Paul"
last_name = "McCartney"
full_name = "#{first_name} #{last_name}"
full_name => "Paul McCartney"
```

DRY

Don't repeat yourself !

Methods

```
def method_name (parameter)  
  // do something with parameter  
end
```

Methods

```
def hello (name)  
  puts "Hello #{name}!"  
end
```

```
hello("John") => "Hello John!"
```

```
hello("Paul") => "Hello Paul!"
```

Full Name Method

```
def full_name (first_name , last_name)  
  return "#{first_name} #{last_name}"  
end
```

```
full_name("John" , "Lennon") => "John Lennon"
```

```
full_name("Paul" , "McCartney") => "Paul McCartney"
```

Time to C Code!

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Use Google!

action object language

reverse string ruby

There's already an inplace reverse method, called "reverse!":

```
$ a = "abc"  
$ a.reverse!  
$ puts a  
cba
```

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```
def age_next_year (age)
  return "Next year I'll be #{age + 1} years old."
end
```

```
def palindrome? (word)
  return word.downcase.reverse ==
  word.downcase
end
```

Array

```
[1, 2, 3, 4]
```

```
["John", "Paul", "George", "Ringo"]
```

```
[2, true, "Hello", 42, "Ringo"]
```

Array Methods

```
[1, 53, 42, 4].sort => [1, 4, 42, 53]
```

```
["John", "Lennon", "George"] << "Ringo"  
=> ["John", "Lennon", "George", "Ringo"]
```

```
[3, 5, true].size => 3
```

```
"Hello World".split(" ") => ["Hello", "World"]
```

```
[1, 2] + [3, 4] => [1, 2, 3, 4]
```

```
def merge_and_sort_array (array_one, array_two)
  return (array_one + array_two).sort
end
```



```
def word_counter (sentence)
  return sentence.split(" ").length
end
```

```
def add_song_to_playlist (playlist_array, new_song)  
  return playlist_array << new_song  
end
```

Conditionals

```
if condition
  // do something
end
```



Conditionals

```
weather = "rainy"  
if weather == "rainy"  
    print "Take an umbrella!"  
end
```



Conditionals

```
weather = "sunny"  
if weather == "rainy"  
    print "Take an umbrella!"  
else  
    print "Go Out!"  
end
```



Conditionals

```
weather = "stormy"
    if weather == "rainy"
        print "Take an umbrella!"
    elseif weather == "stormy"
        print "Stay Home!"
    else
        print "Go Out!"
    end
```

```
def odd_or_even (number)
  if number.odd?
    return "odd"
  else
    return "even"
  end
end
```

```
def can_you_vote? (age)
  if age >= 18
    return true
  else
    return false
  end
end
```



```
def max (a , b)
  if a > b
    return a
  else
    return b
  end
end
```

Resources

Codecademy

← Ruby

codecademy

Me

Putting the Form in For... 1/7

What You'll Be Building

This project will help you create a small program that will read a user's input and correct his or her capitalization. Users can provide an almost infinite range of input, so it makes our lives easier as programmers to make their input standard before doing anything with it.

Instructions

Check out the code in the editor—we've added some new things that we'll be teaching you. Can you guess what it does? Click **Save & Submit Code** to find out!

Answer each question, and hit **enter** to return on a comma.

[Q&A Forum](#) [Glossary](#)

script.rb

```
1 print "What's your first name?"
2 first_name = gets.chomp
3 first_name.capitalize!
4
5 print "What's your last name?"
6 last_name = gets.chomp
7 last_name.capitalize!
8
9 print "What city are you from?"
10 city = gets.chomp
11 city.capitalize!
12
13 print "What state or province are you from?"
14 state = gets.chomp
15 state.upcase!
16
17 puts "Your name is #{first_name} #{last_name} and you're from #{city}, #{state}!"
```

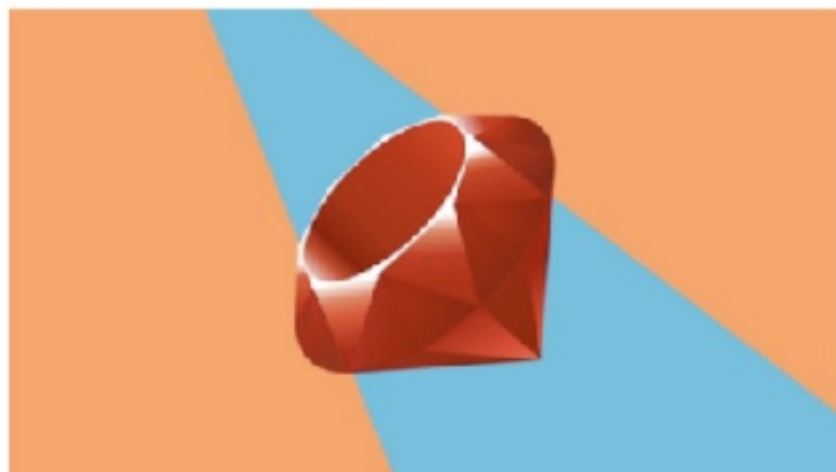
Save & Submit Code

Reset Code

Udemy

Cursos de Ruby

Categorias relacionadas: Desenvolvimento, TI e software, Linguagens de programação, Desenvolvimento web



Curso em destaque

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Thank you!



Feel free to contact me!

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