

Ruby 101.

Programing basics



Outline.

Ruby and its ecosystem

Ruby basics

- types
- variables
- operations

Livecodes

Web app demo



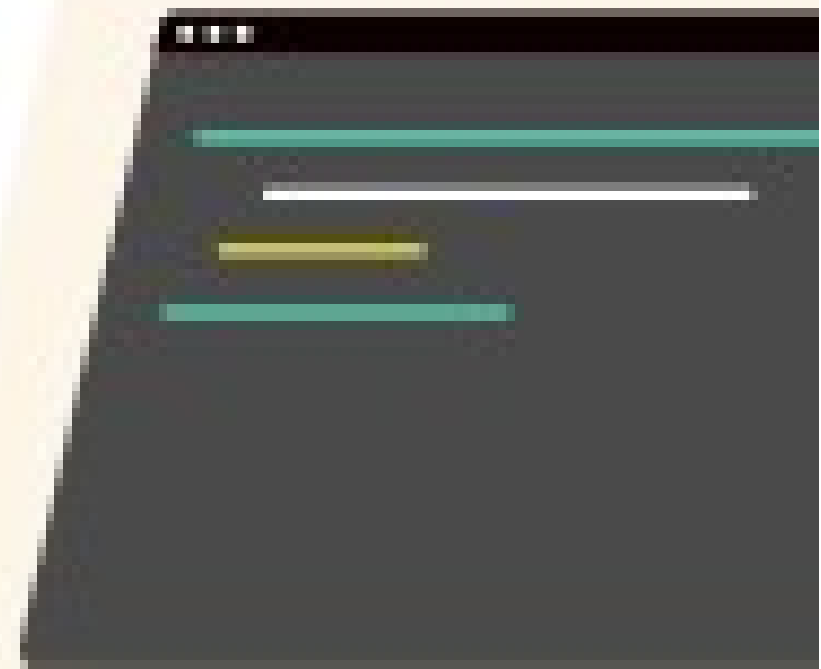
Ruby.

Open Source programming language.

Motto: programming should be simple and fun.



>

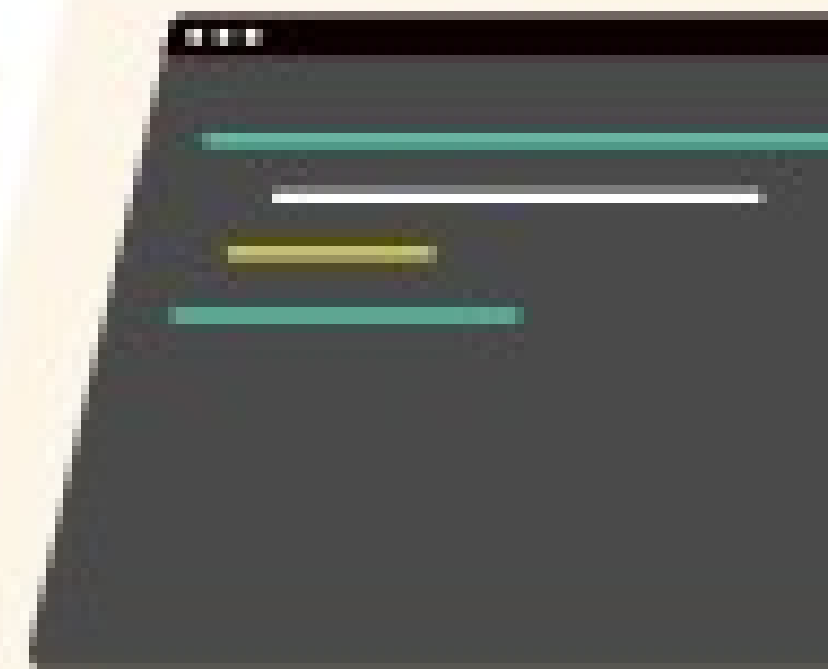


Ruby on Rails.

Web framework written in Ruby.



>

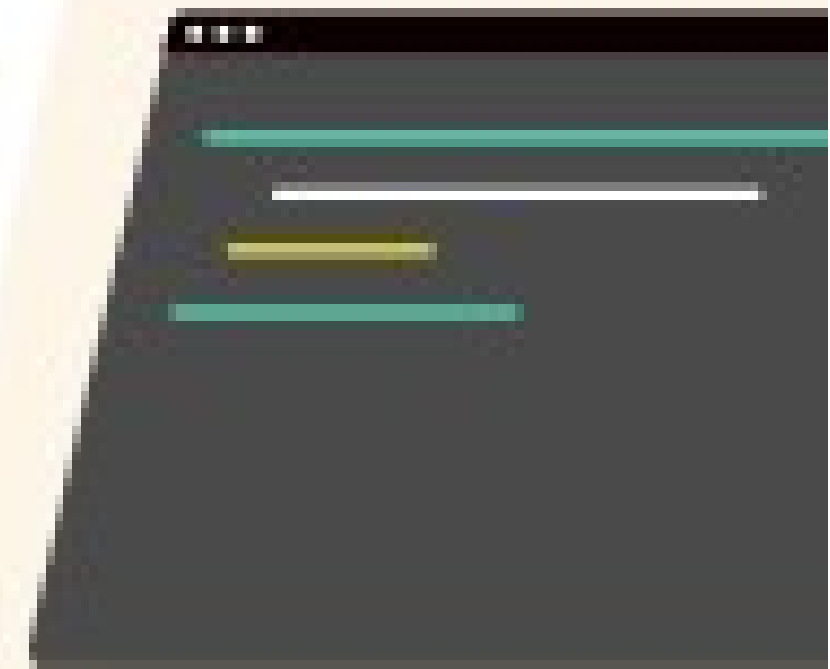


Ruby Basics.

Types, variables & operations.



>



1. Types of data.

"Bob Dylan"

32

3.14

["Bob", "Alanis", "Janis"]

{ "Bob" => "Folk", "Janis" => "Rock" }

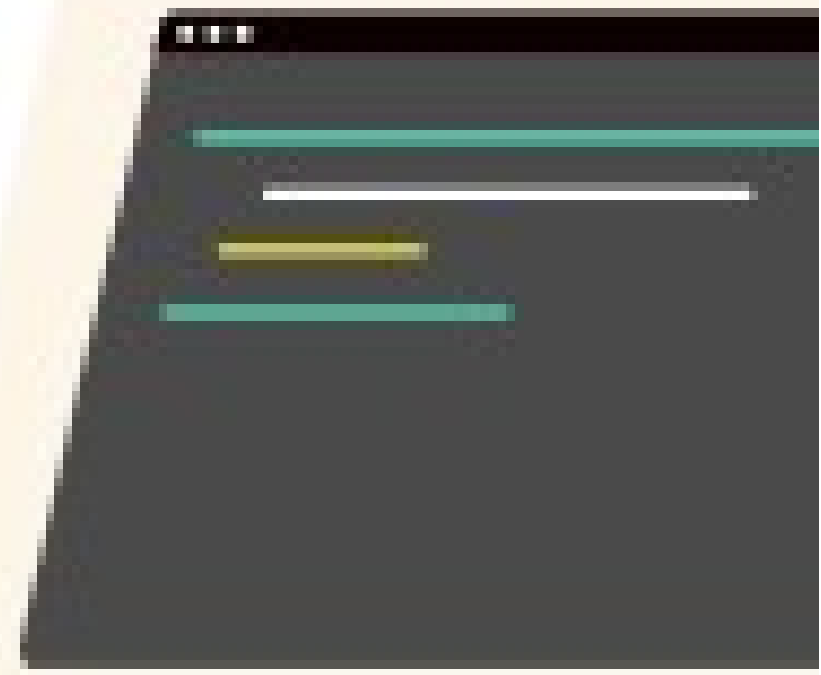
String

Integer

Float

Array

Hash



Special Types.

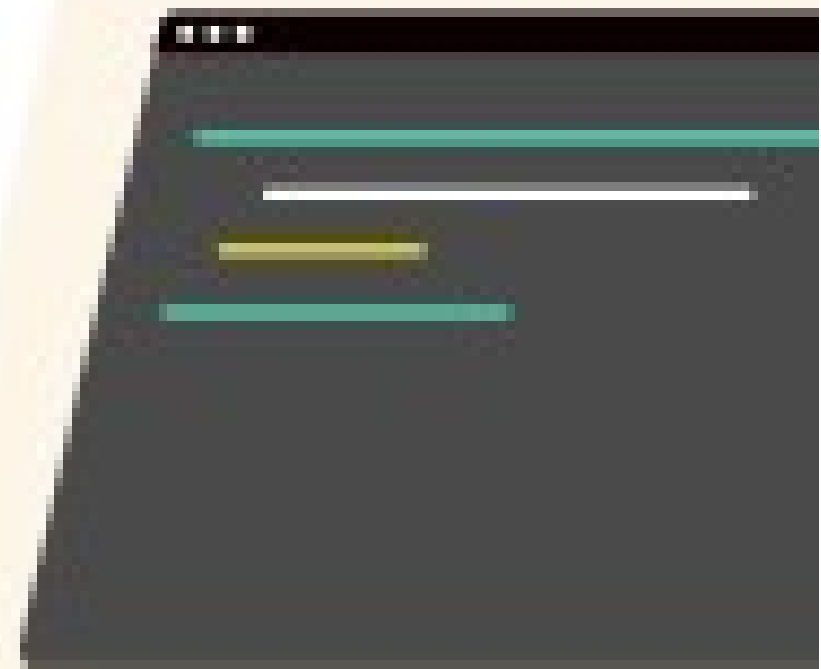
true

false

nil



>



2. Variables.

To **store** data and **re-use** it.



>



Variables.

```
name = "Bob"
```

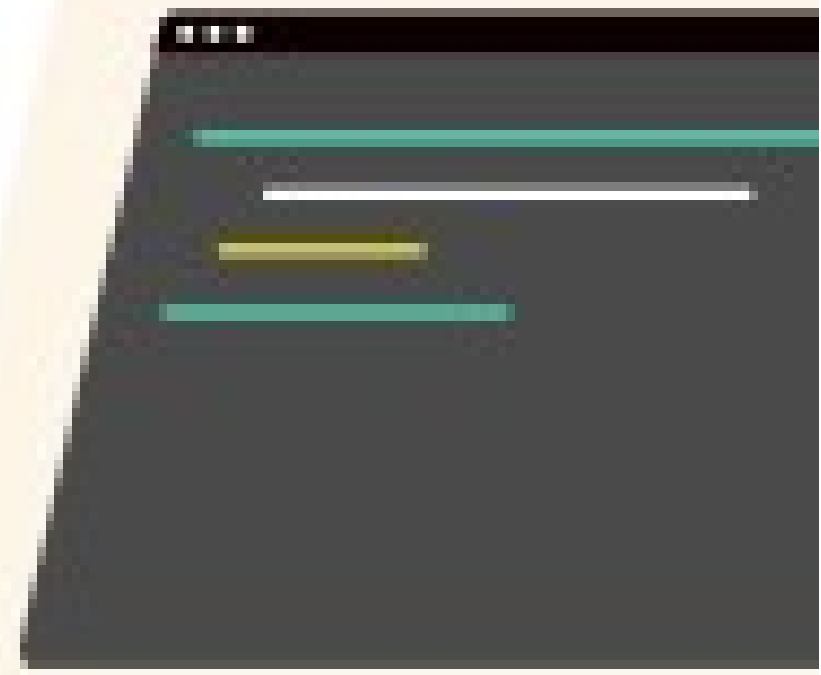
```
age = 78
```

```
puts "Hey #{name.upcase} ! You are #{age} years old."
```

```
puts "Lucky you, it's your birthday!"
```

```
age = age + 1
```

```
puts "You are now #{age}"
```



3. Ruby operations.

What we can do with our data types.

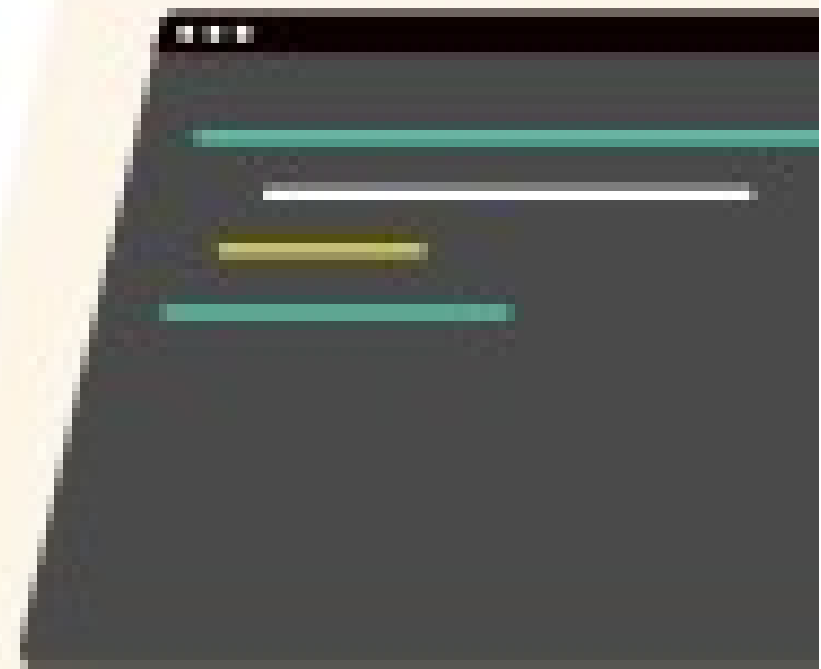


Say Hi.

```
puts "Hello world"
```



```
>
```



Number.

1 + 2

=> 3

2 * 4

=> 8

18.even?

=> true

1984.to_s

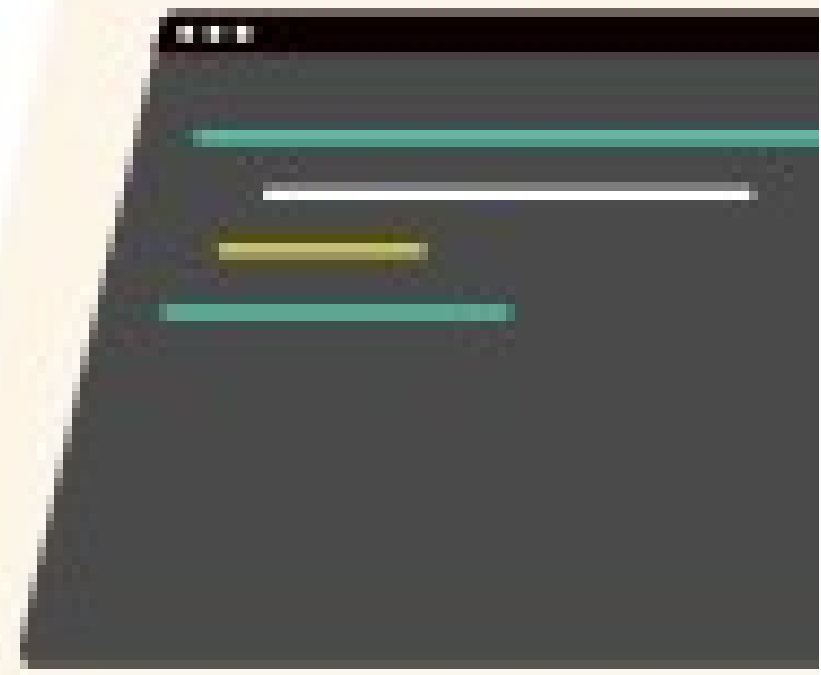
=> "1984"

3.141.truncate

=> 3

1.618.round

=> 2



String.

```
"Hello World".upcase
```

```
=> "HELLO WORLD"
```

```
"Hello " == "Hello"
```

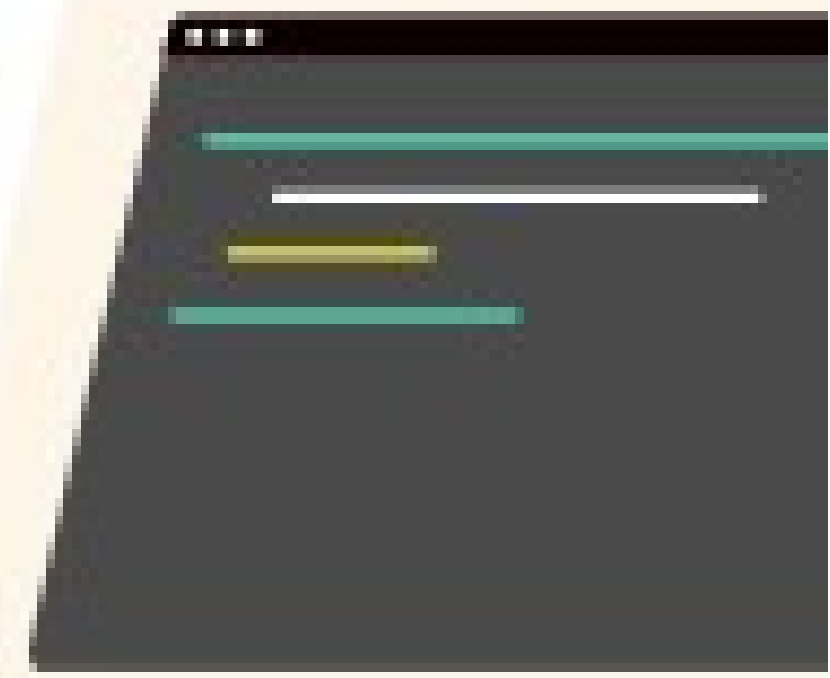
```
=> false
```

```
"1984".to_i
```

```
=> 1984
```

```
"Seven: #{3 + 4}"
```

```
=> "Seven: #{3 + 4}"
```



Livecode 1.

Let's introduce ourselves.

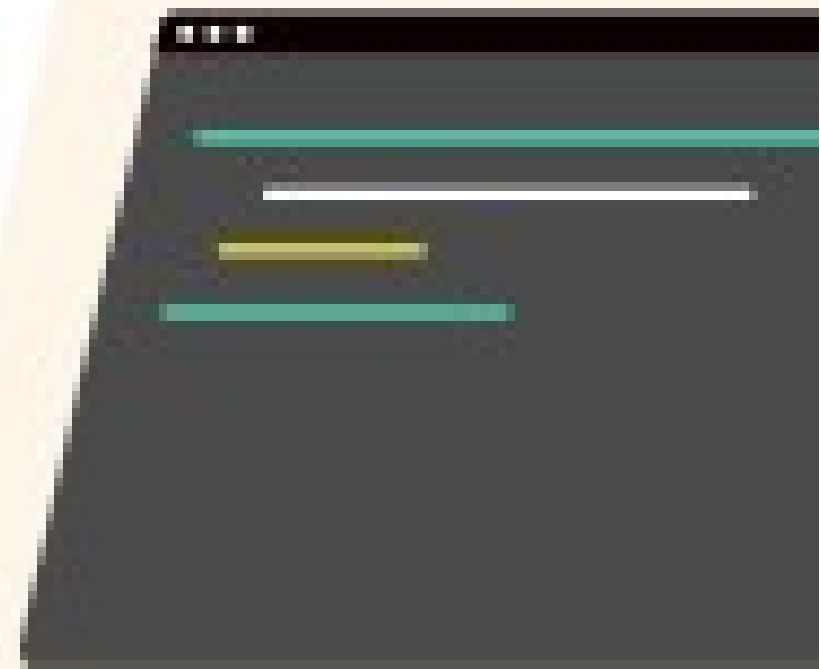


Steps.

- Store your first name into a variable
- Display a hello message
- Display your first name



>

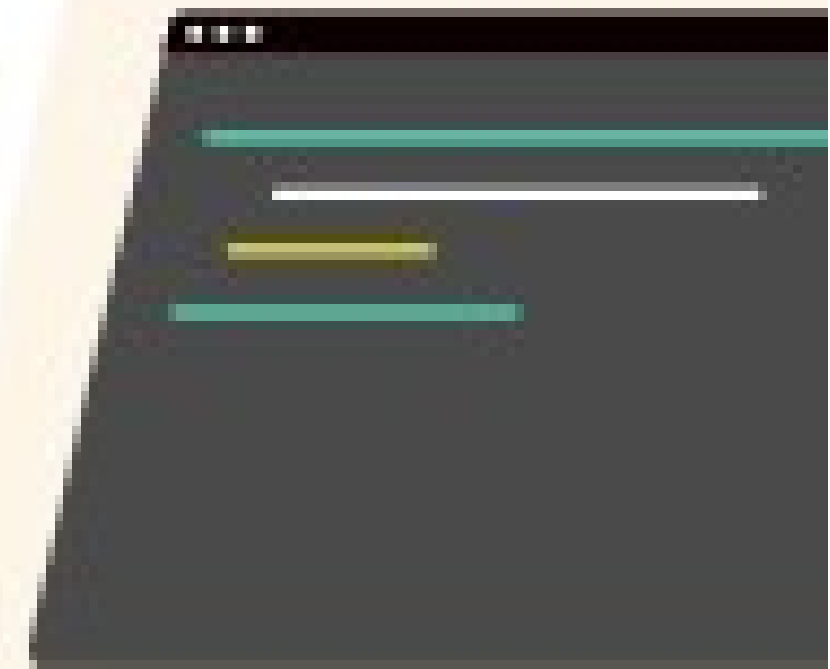


Expected Result.

Hello!

My name is Cecile.

Tonight we learn to code.



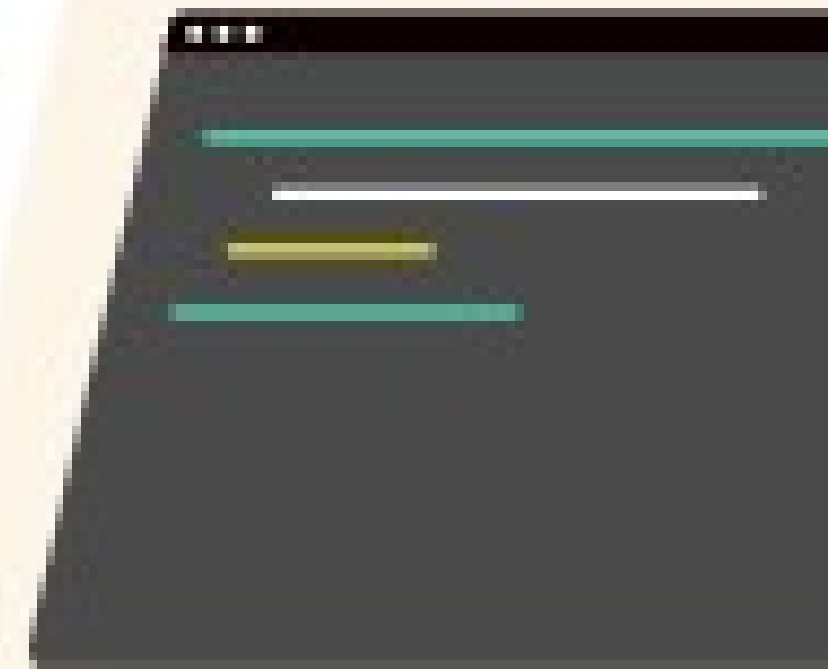
Your turn!

7 min

<https://repl.it/languages/ruby>



>_



Array.

```
genres = ["Rock", "Folk", "Metal"]
```

```
genres.size
```

=> 3

```
genres.first
```

=> "Rock"

```
genres[1]
```

=> "Folk"

```
genres[25]
```

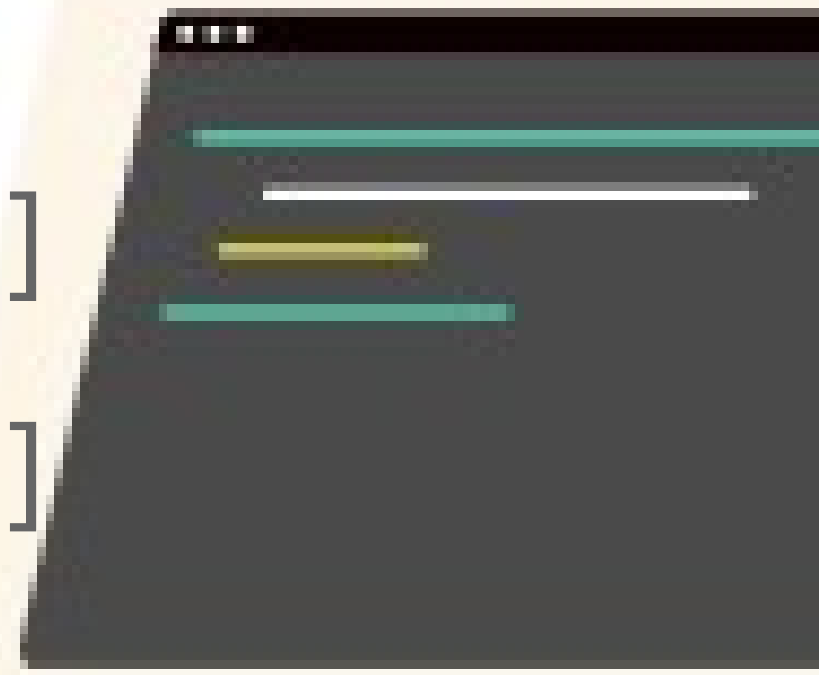
=> nil

```
genres << "Pop"
```

=> ["Rock", "Folk", "Metal", "Pop"]

```
genres.sort
```

=> ["Folk", "Metal", "Pop", "Rock"]



Loops.

```
genres = ["Rock", "Folk", "Metal"]
```

```
genres.each do |genre|
```

```
  puts "I like #{genre}"
```

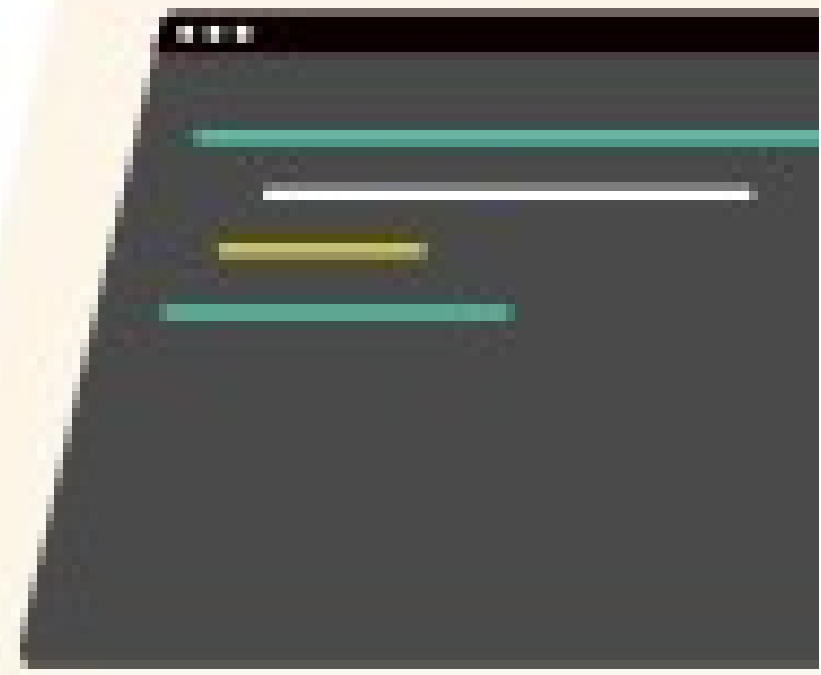
```
end
```

Result

```
I like Rock
```

```
I like Folk
```

```
I like Metal
```



Livecode 2.

What about your hobbies?



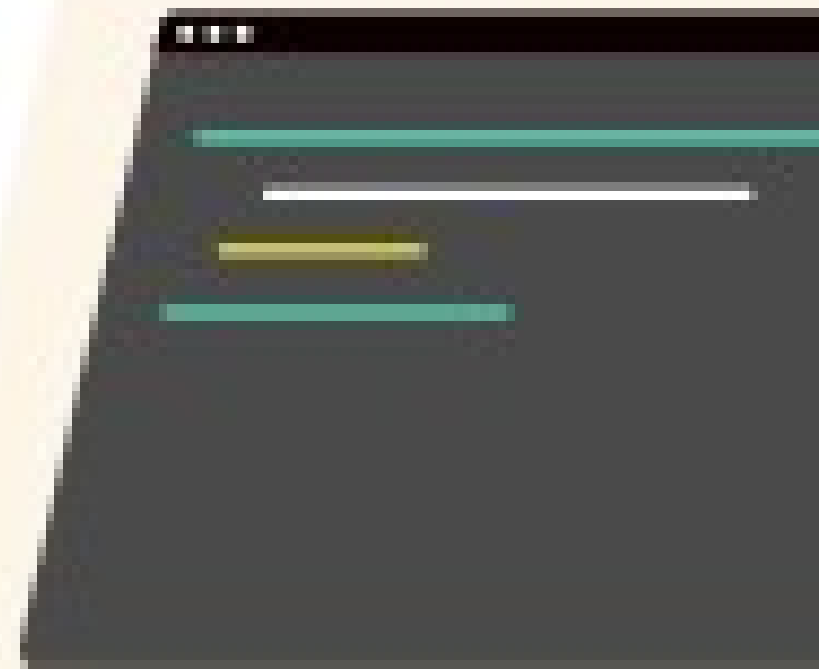
Steps.

We'll enhance our code with the following:

- Store the list of your hobbies into a variable
- Display them



>



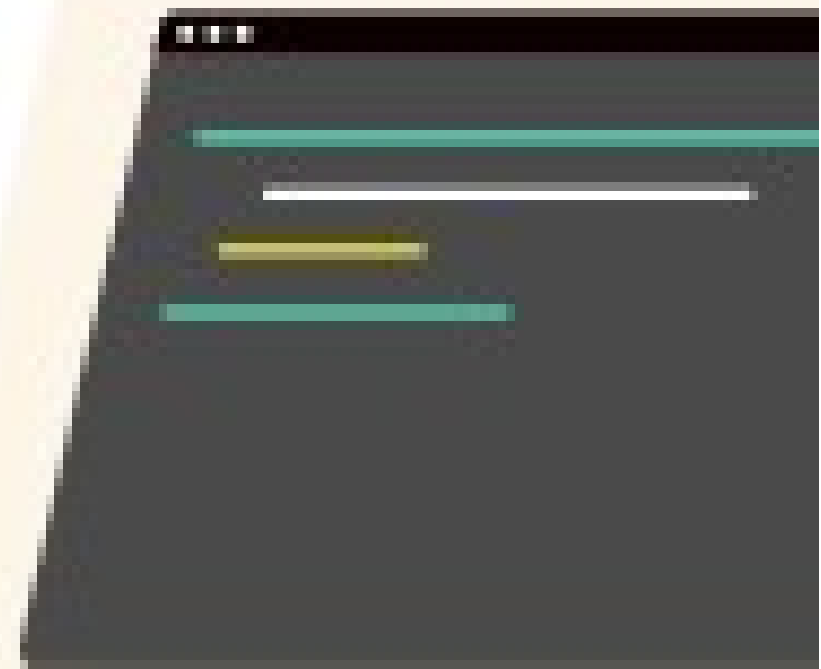
Expected Result.

Hello!

My name is Cecile.

My hobbies are:

- Gardening
- Traveling



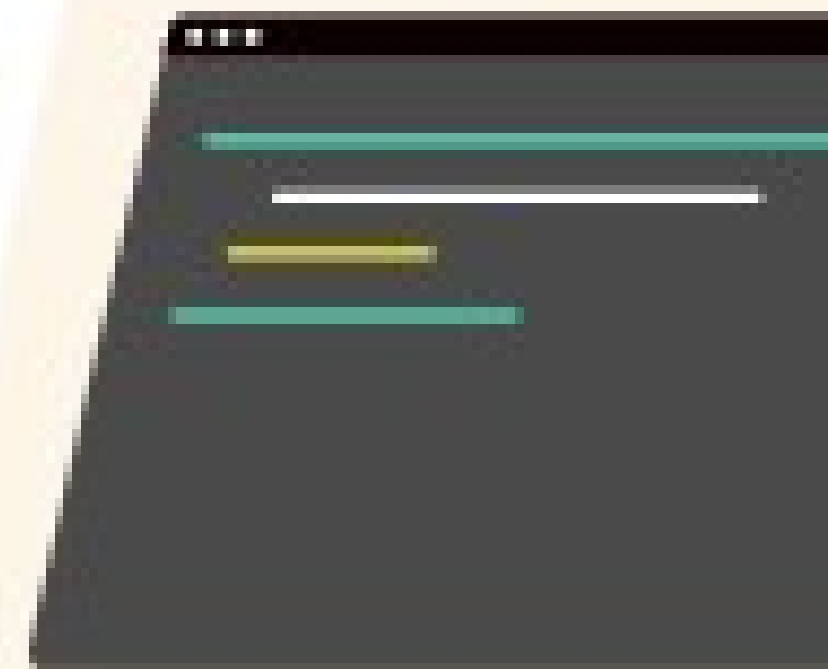
Your turn!

7 min

<https://repl.it/languages/ruby>



>_



Hash.

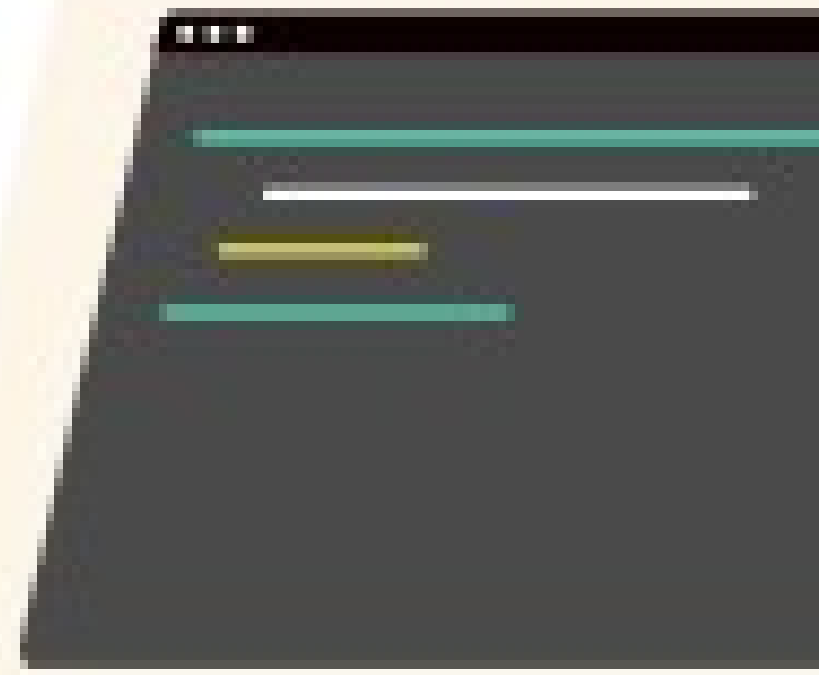
```
artist = {  
  "name" => "Bob",  
  "genre" => "Folk",  
  "age" => 78  
}
```

```
artist["name"]
```

=> "Bob"

```
artist["age"] = 79
```

=> 79



Livecode 3.

Let's modelize your profile data!



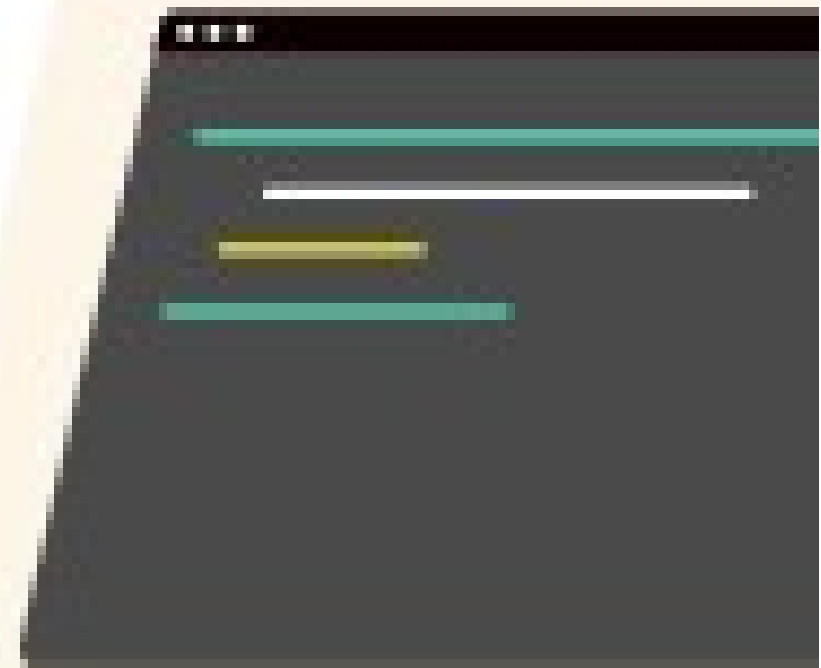
Profile data.

Your profile is composed of:

- Your first name
- Your picture URL
- A short quote
- Your super powers



>

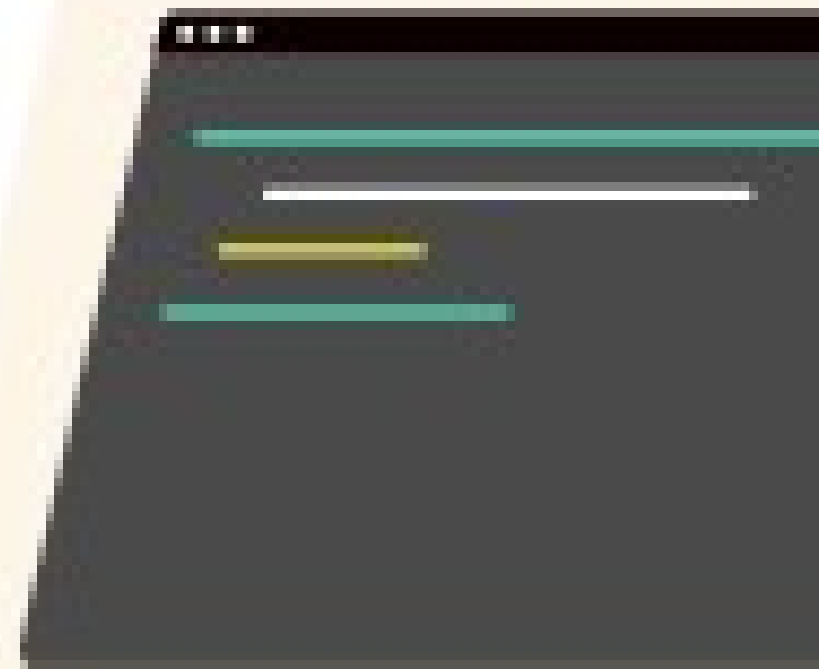


Steps.

1. Choose the best data type for your profile
2. Store your profile within a variable
3. Display your profile information



>



Expected Result.

Note: We won't display the picture for now.

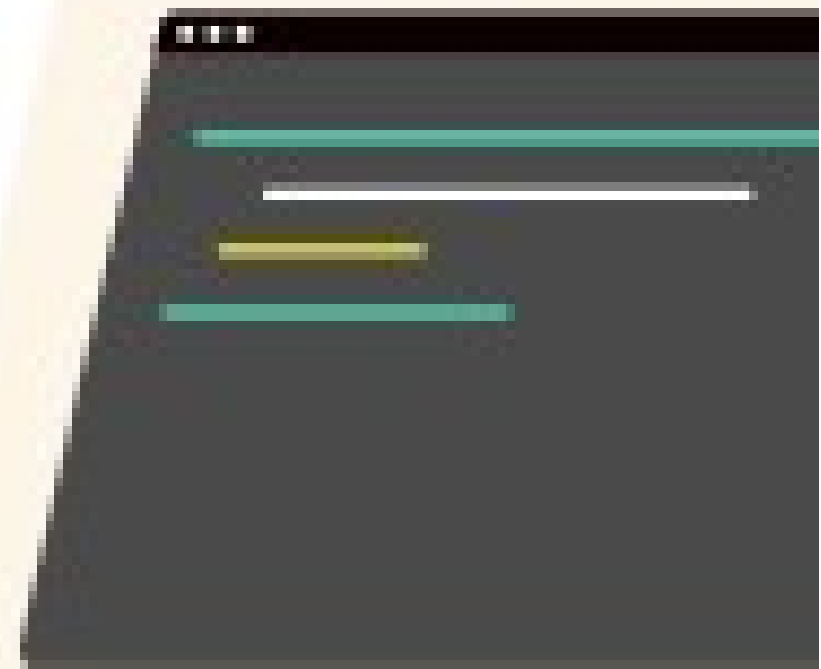
Hello!

My name is Cecile

> All you need is code

Super powers:

- Ruby wizard
- Can speak Dutch



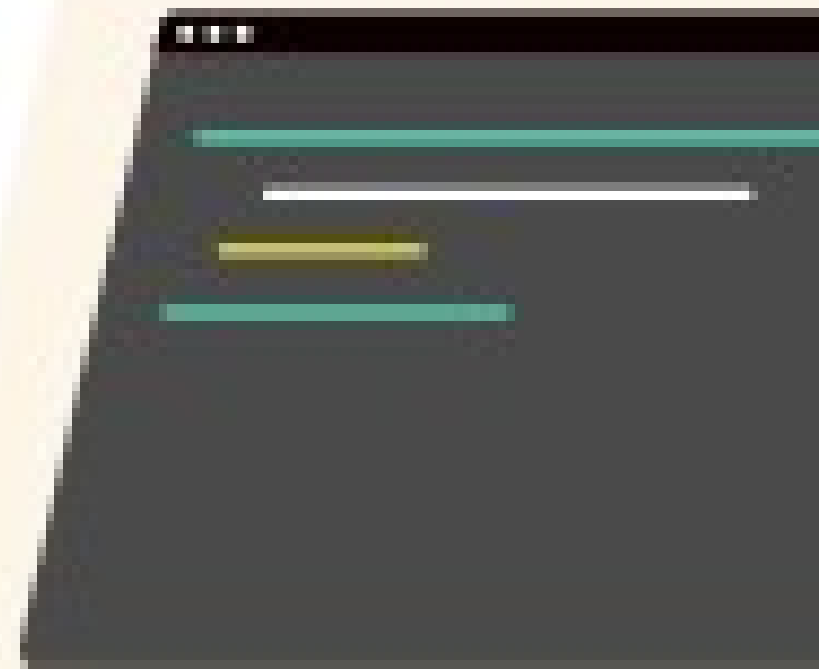
Your turn!

15 min

<https://repl.it/languages/ruby>



>_



Demo time.

Let's see your profiles in a web app!





Women's Coding Night

Introducing the Women who code



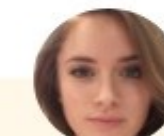
Tiffany

"J'ai découvert que le code est accessible à tous ceux qui s'en donnent les moyens."



Caroline

"L'univers Tech m'a paru une super opportunité. Et j'avais un goût pour la 'bidouille' informatique."



Ophélie

"I've decided to start a new life and change my career to the wonderful world of web development!"



Faten

"J'ai un projet entrepreneurial à forte dimension digitale."



Maylis

"Associer learning by doing et accompagnement individuel"



Marie-Noëlle

"I used to work in Management Consulting and Public Affairs, until I realized I"



Paola

"Je me tourne vers le numérique pour comprendre les contraintes des"



Mélanie

"Learn code is about working all around the world, it can offer a freedom of travel"



Thank **you.**

