

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.

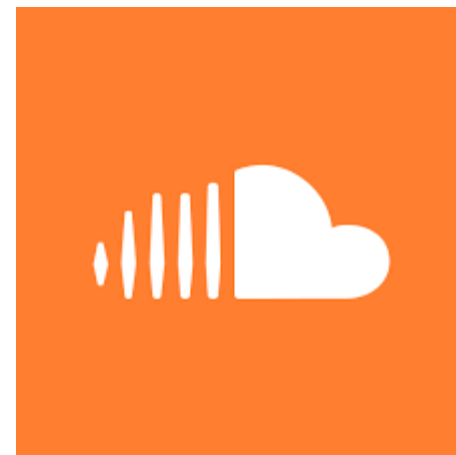


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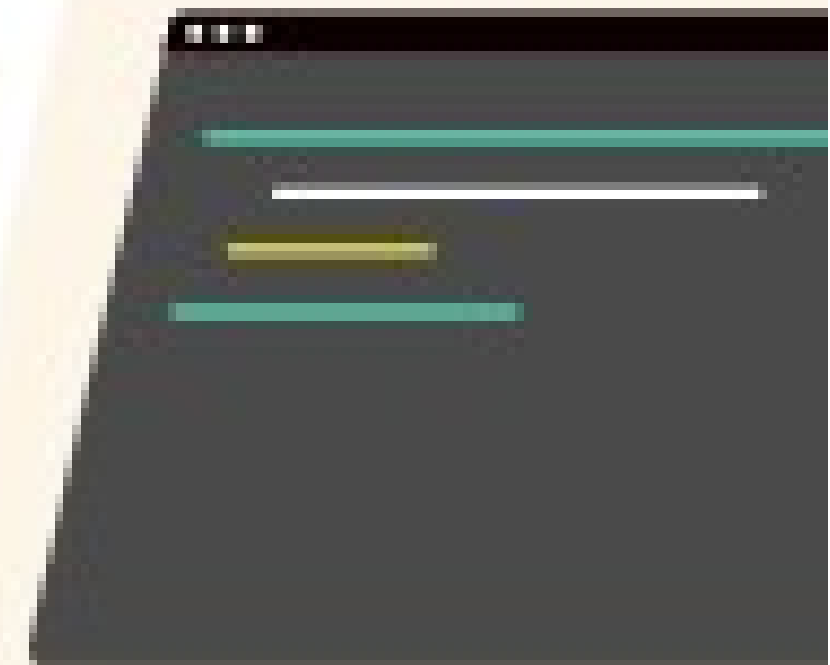


Ruby on Rails.

Web framework written in Ruby.



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Ruby Basics.

Types, variables & operations.

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



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1. Types of data.

"Bob Dylan"

32

3.14

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

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

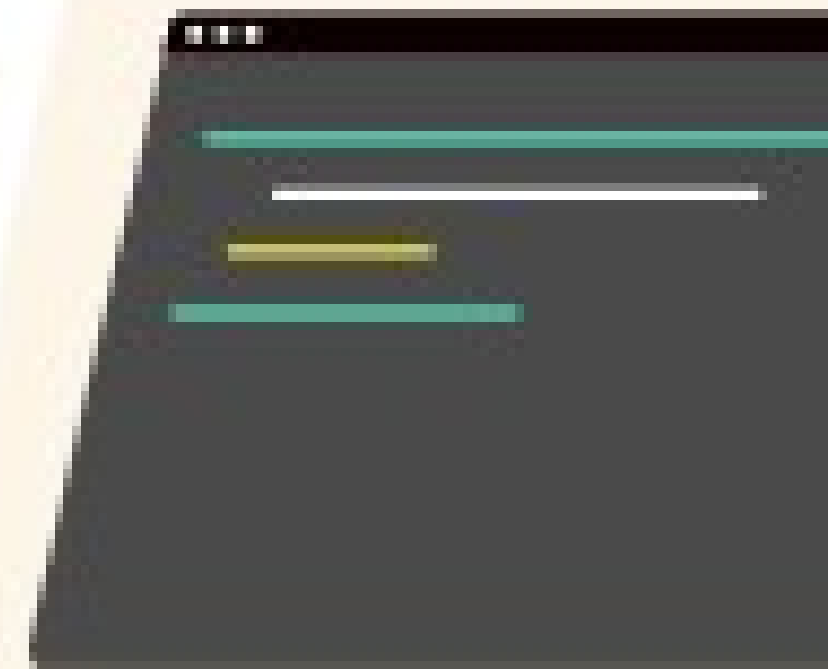
String

Integer

Float

Array

Hash



Special Types.

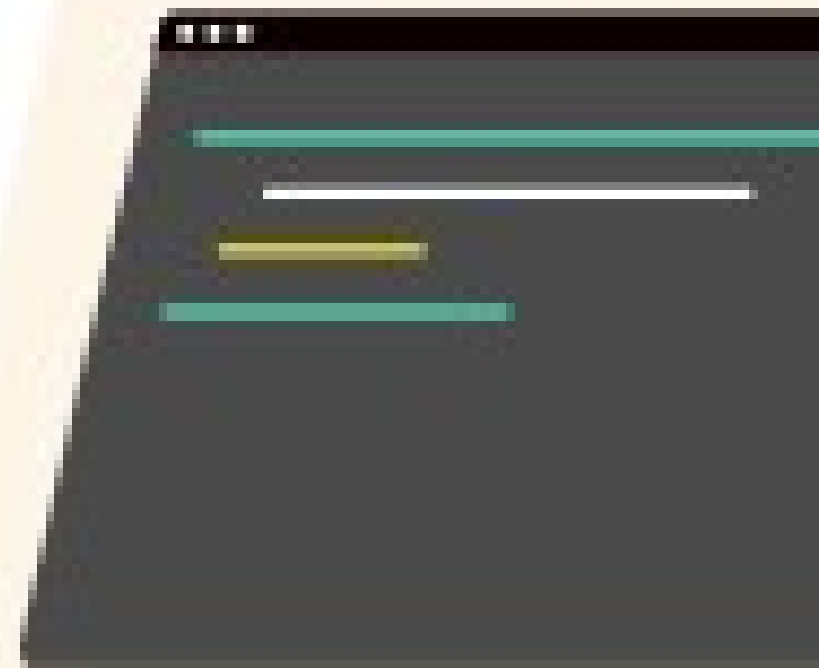
true

false

nil



>



2. Variables.

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



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Variables.

```
name = "Bob"
```

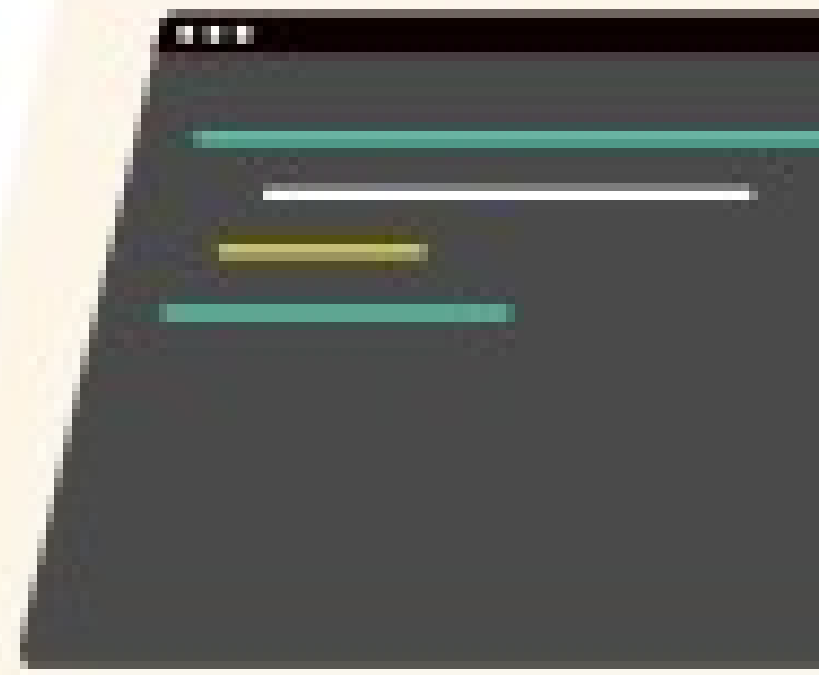
```
age = 78
```

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

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

```
age = age + 1
```

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

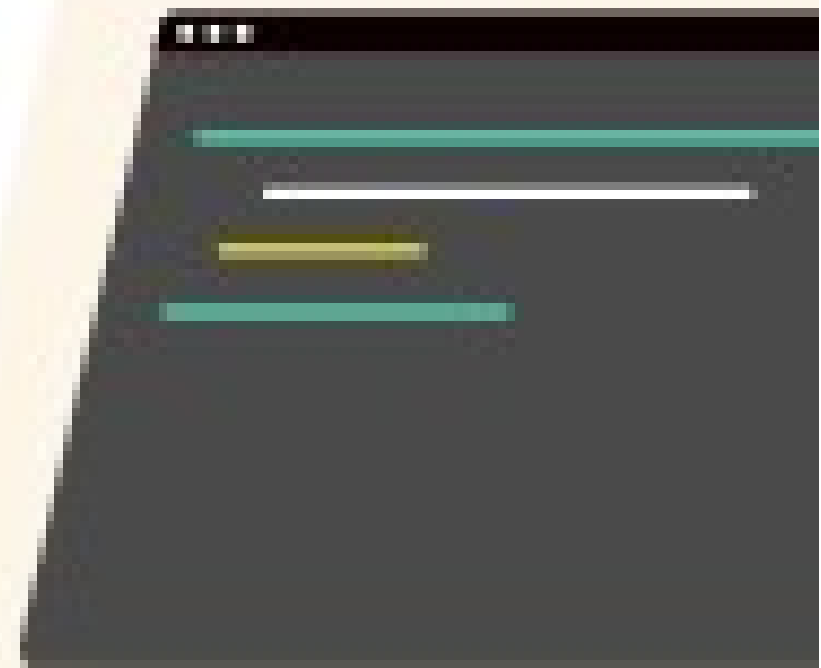


3. Ruby operations.

What we can do with our data types.



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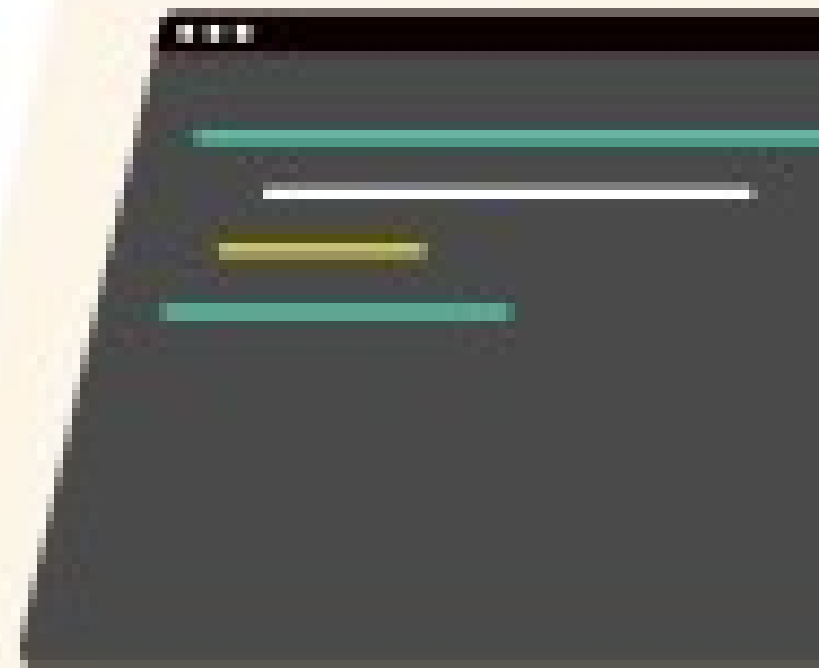


Say Hi.

```
puts "Hello world"
```



```
>
```



Number.

1 + 2

=> 3

2 * 4

=> 8

18.even?

=> true

1984.to_s

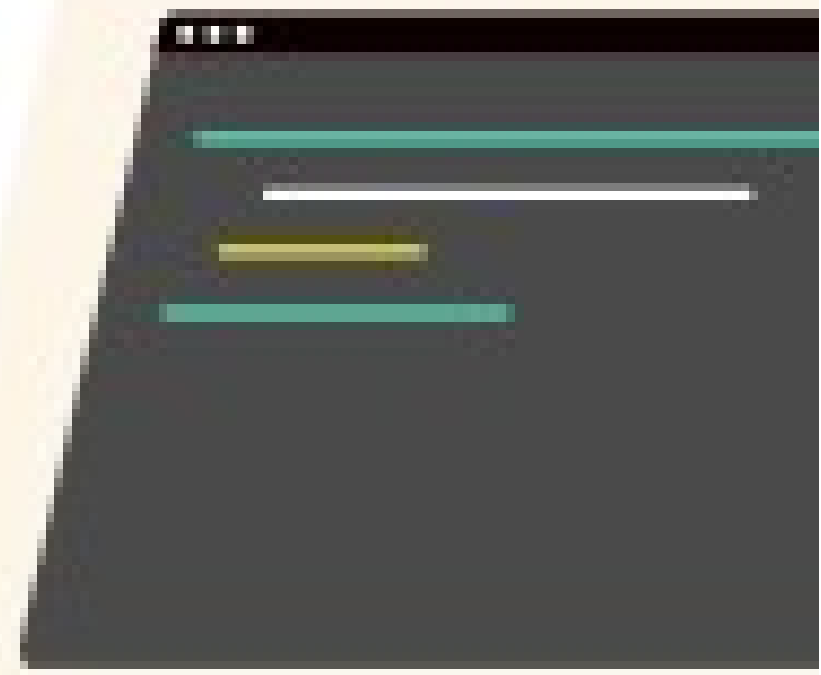
=> "1984"

3.141.truncate

=> 3

1.618.round

=> 2



String.

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

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

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

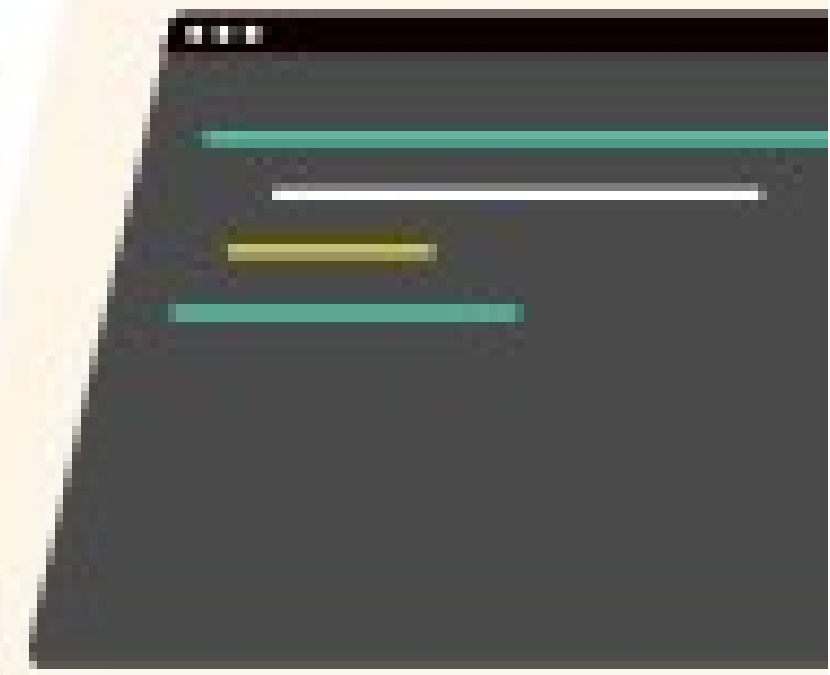
```
=> false
```

```
"1984".to_i
```

```
=> 1984
```

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

```
=> "Seven: 7"
```



Livecode 1.

Let's introduce ourselves.

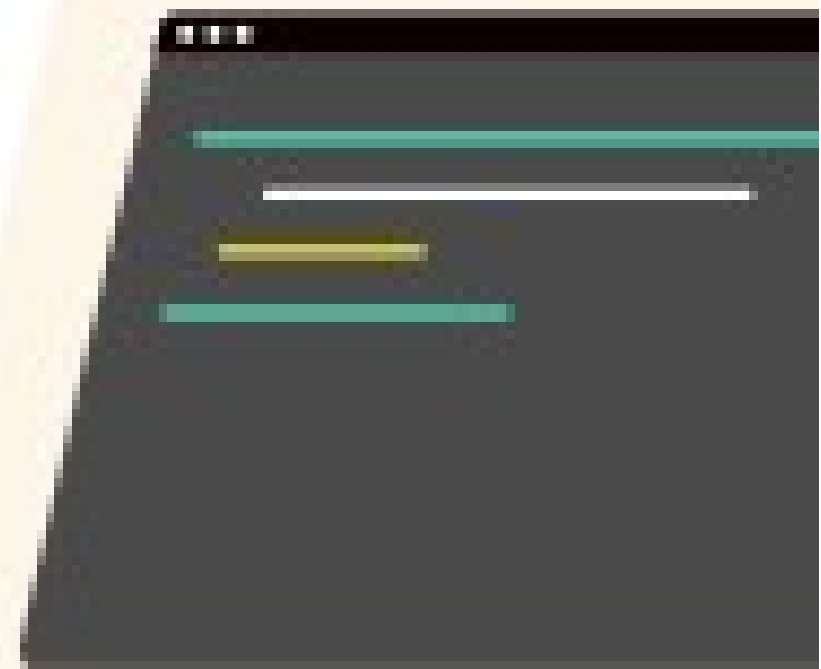


Steps.

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



>



Steps.

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

Expected Result.

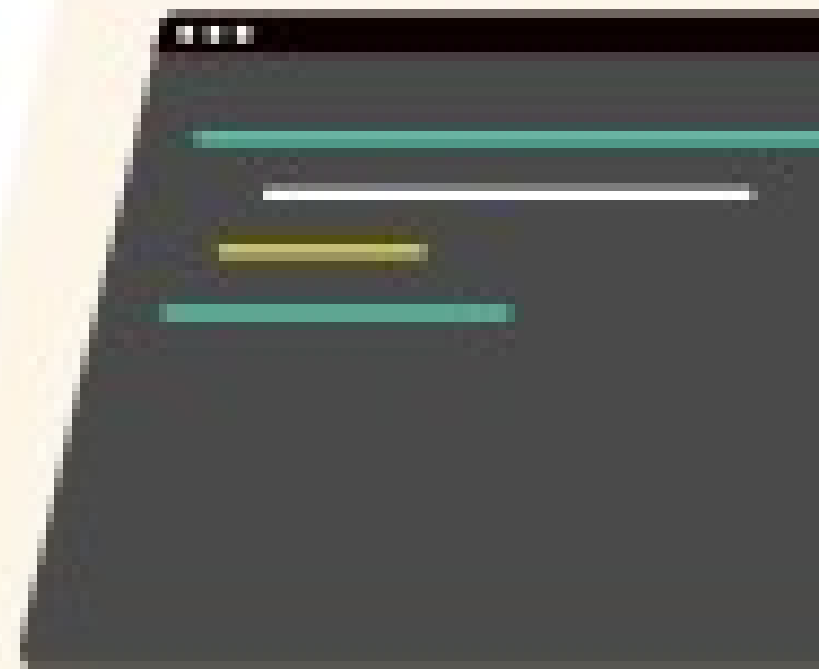
Hello!

My name is Cecile.

Today we learn to code.



>



Your turn!

10 min

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



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Array.

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

```
genres.size
```

=> 3

```
genres.first
```

=> "Rock"

```
genres[1]
```

=> "Folk"

```
genres[25]
```

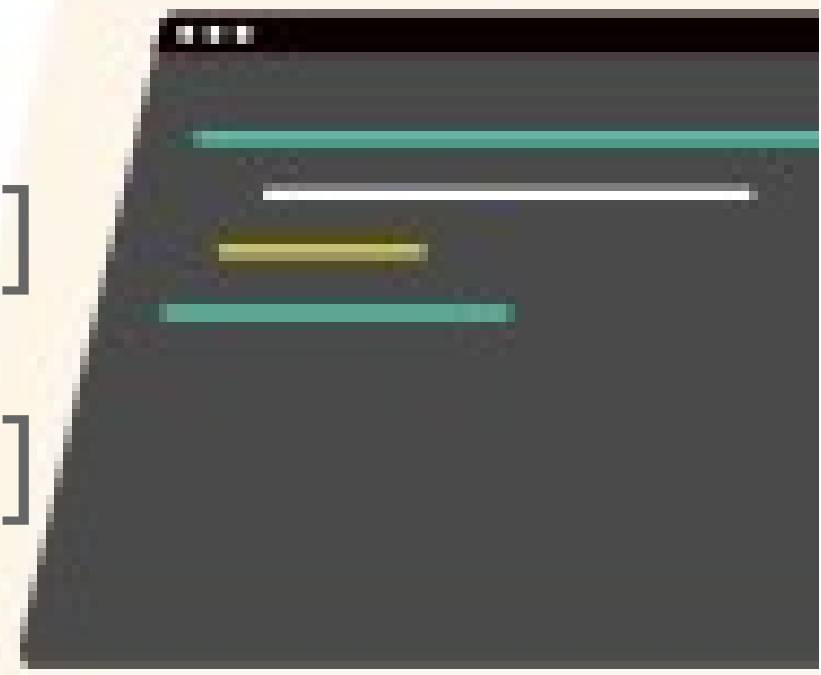
=> nil

```
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}"
```

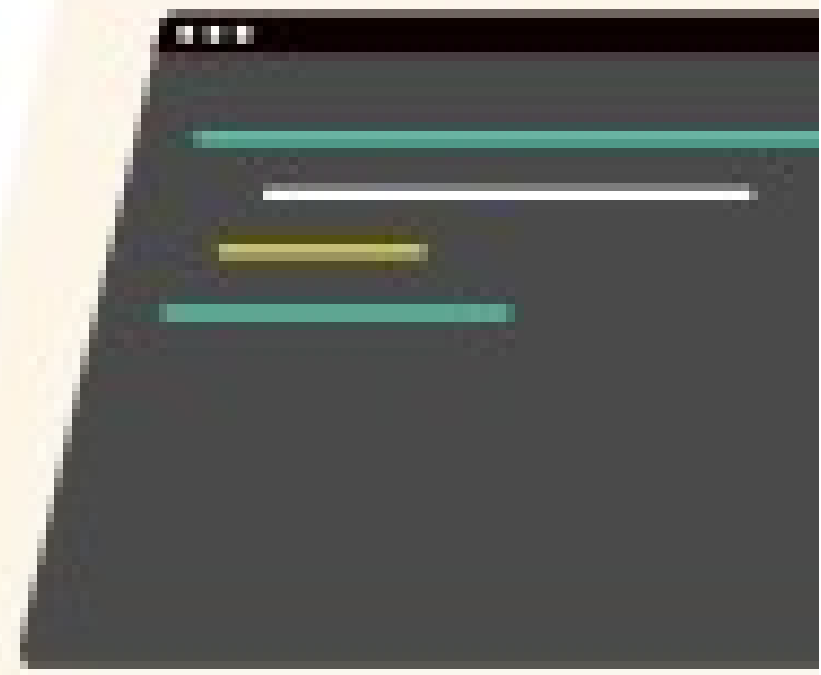
```
end
```

Result

```
I like Rock
```

```
I like Folk
```

```
I like Metal
```



Livecode 2.

What about your hobbies?



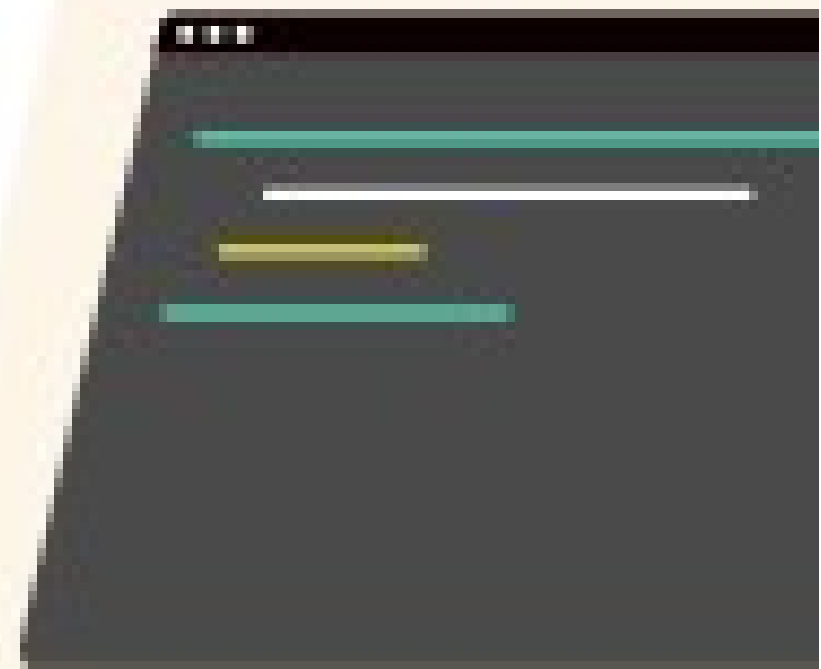
Steps.

We'll enhance our code with the following:

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



>



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



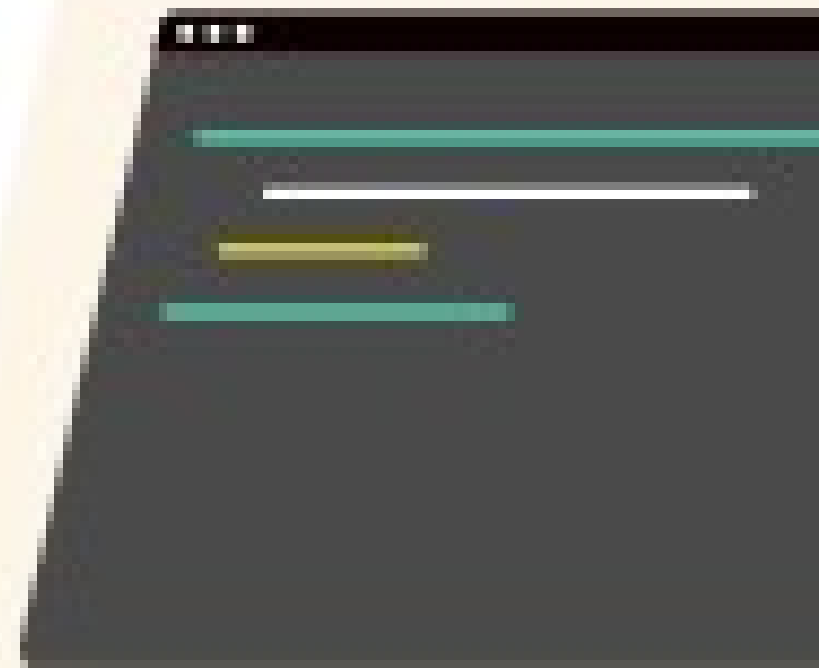
Your turn!

15 min

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



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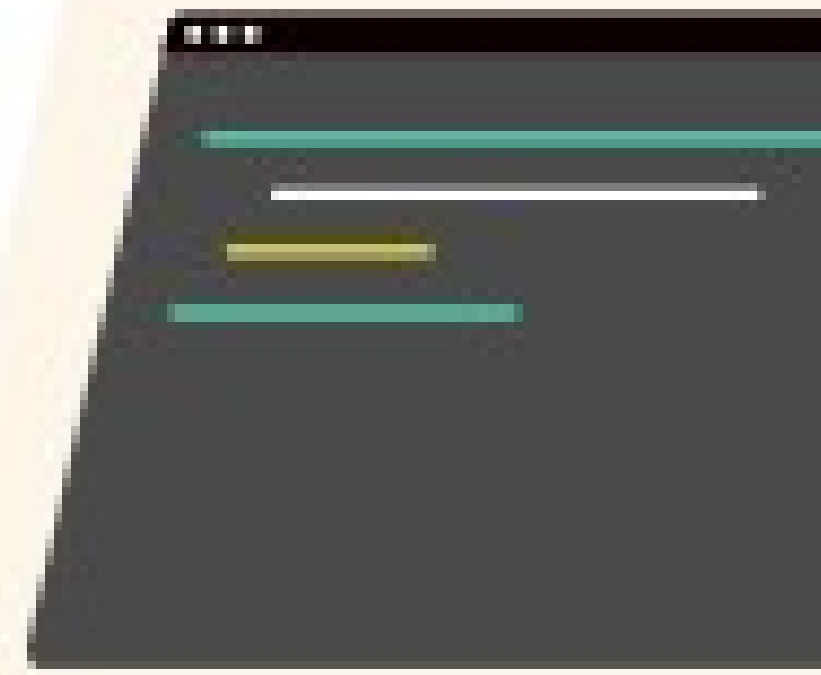


Hash.

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

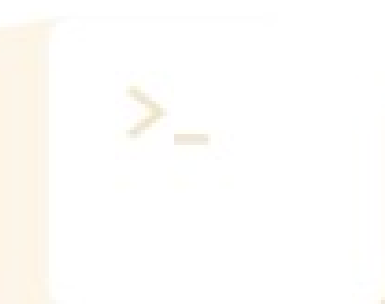
artist["name"] => "Bob"

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



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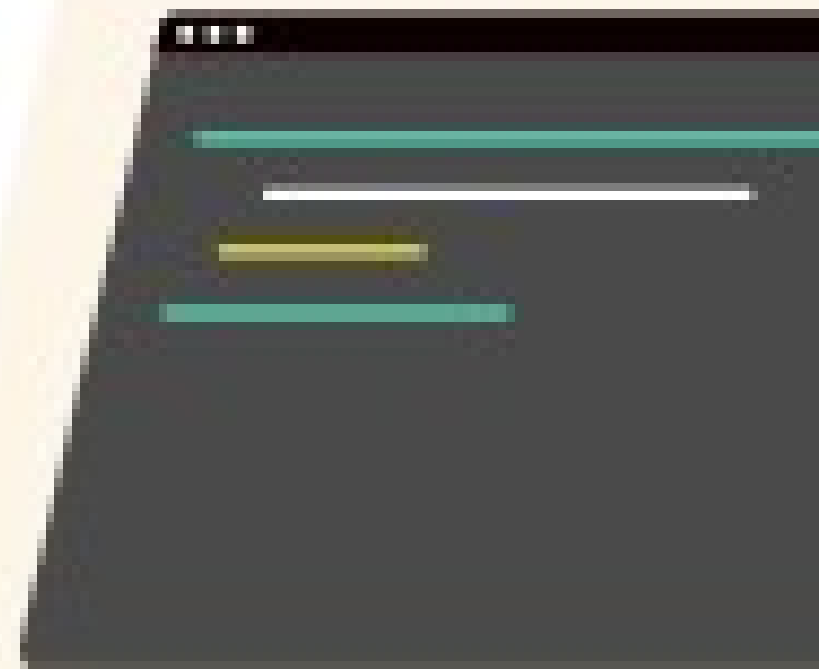


Steps.

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



>



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



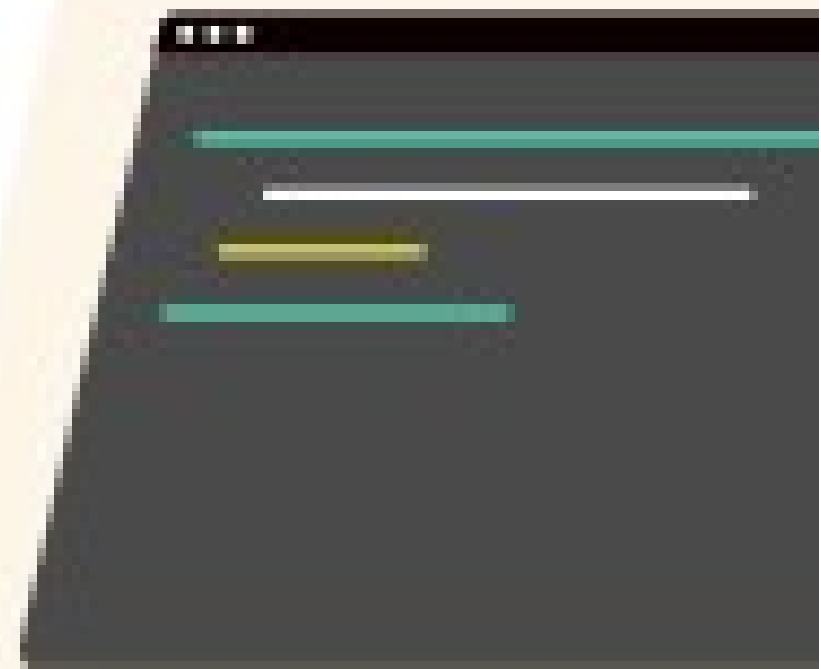
Your turn!

20 min

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

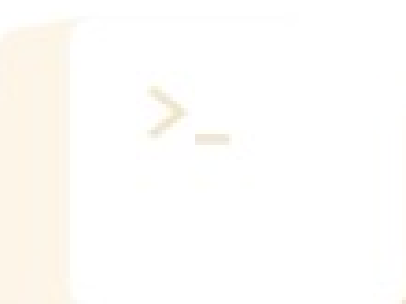


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Demo time.

Let's see your profiles in a web app!





Introducing the Women who code 🙌



Cecile

"All you need is code"



Mélanie

"Learn code is about working
all around the world."



Johanne

"Je souhaitais changer de
domaine professionnel pour
partir vivre à l'étranger."



Sybil

"Le code c'est démarrer une
nouvelle aventure."



Ophélie

"Les compétences tech me
sont indispensables."



Marion

"J'ai toujours ressenti le
besoin d'acquérir des
compétences tech."



Caroline

"J'avais un goût pour la
'bidouille' informatique."



Paola

"Finalement le code est
accessible à toutes."



Thank **you.**



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