Wealthsimple

Functional Programming With Ruby

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Why Functional Programming?

• Concise.

Achieve more with fewer lines of code.

• Predictable.

Easily understand and predict what the code does.

• Testable.

Greater confidence in the correctness of your code.



Functional Programming...

Avoids shared states.

• Avoids mutable data.

• Avoids side effects.



The Fundamentals

• map

Applies an operation to every element in a list.

• select

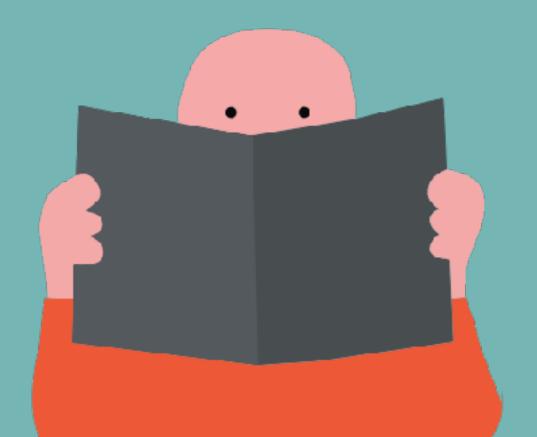
Filters a list based on the evaluation of an expression.

• reduce



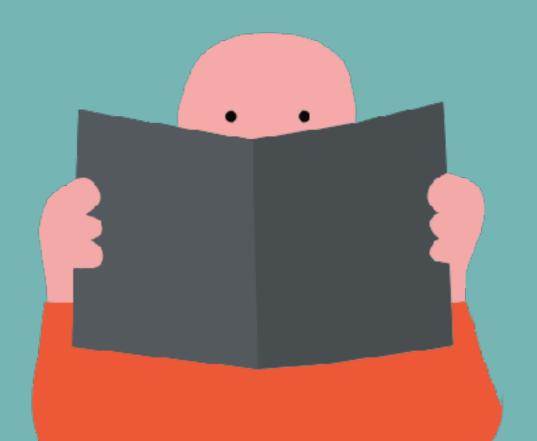
Map

list.map { |element| operation(element) }



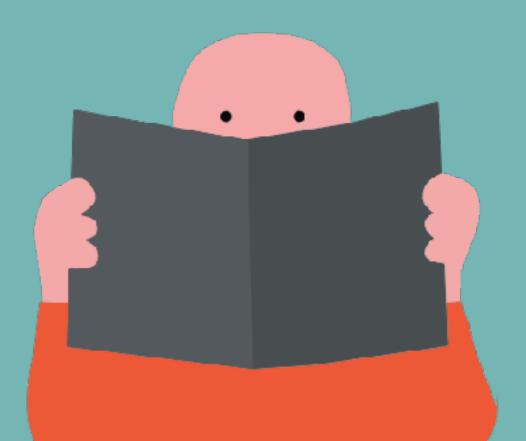
Select

list.select { |element| expression(element) }



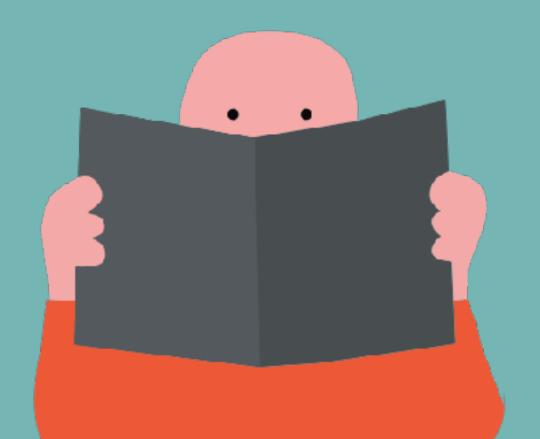
Reduce

list.reduce { |aggregation, element| operation(aggregation, element) }



Putting It All Together

Live Demo



Resources

Intro to Ruby: https://www.codecademy.com/tracks/ruby/resume

Ruby On Rails: http://guides.rubyonrails.org/getting_started.html

Functional Programming: http://joelmccracken.github.io/functional-programming-in-ruby



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Questions?

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