

Consistently Inconsistent



Conor Hoekstra



code_report



codereport



nVIDIA

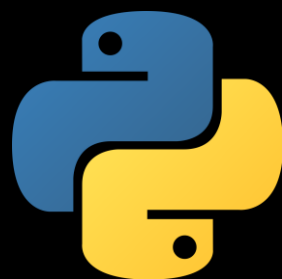
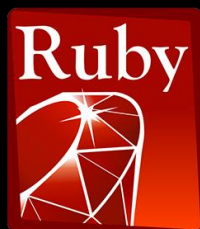
RAPIDS

<https://rapids.ai>

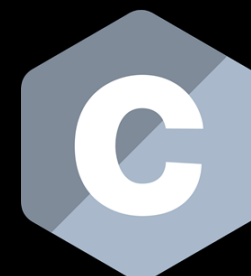
#include



ALGOL



COBOL
LANGUAGE





Conor Hoekstra

@code_report

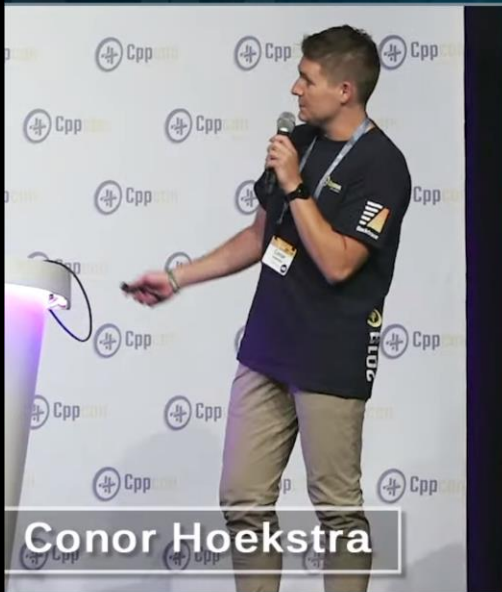


1. First language: TI-BASIC
2. Had difficulties: Make
3. Most used: C++
4. Totally hate: I ❤️ all PLs
5. Most loved: Haskell
6. For beginners: Python

@TI_BASIC #cplusplus #python #Haskell

8:12 PM · Oct 4, 2019

#include



Conor Hoekstra

23 Ranges:
slide & stride


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ansatz



23 Ranges: slide & stride

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windowed



sliding



slide













divvy



partition



	Language	step, size = ?	step = size	step = 1	size = 1
	C++	-	chunk	sliding	stride
	Haskell	divvy	chunksOf	-	-
	Elixir	chunk_every/4	chunk_every/2	-	take_every
	Ruby	-	each_slice	each_cons	each_with_index
	D	slide	chunks	slide*	stride
	Rust	-	chunks	windows	-
	F#	-	chunkBySize	windowed	-
	Clojure	partition	partition	-	take-nth
	Kotlin	windowed	chunked	windowed*	-
	Scala	sliding	grouped	sliding**	-

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	Kotlin	windowed	chunked	windowed*	-
	Scala	sliding	grouped	sliding**	-



sort + unique























uniq



distinct



	Language	remove duplicates	std::unique
	C++	sort + unique	unique
	Haskell	sortUniq	-
	Elixir	uniq	dedup
	Ruby	uniq	-
	D	uniq	squeeze*
	Rust	unique	dedup
	F#	distinct	-
	Clojure	distinct	dedupe
	Kotlin	distinct	-
	Scala	distinct	-

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	Scala	distinct	-



in
canFind
elem
contains
member



	Language	Pythonic “in”
	C++	contains
	Haskell	elem
	Elixir	member?
	Ruby	include?
	D	canFind
	Rust	contains
	F#	contains
	Clojure	contains?
	Kotlin	contains
	Scala	contains
	Python	in
	Racket	member

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	Scala	contains
	Python	in
	Racket	member



any_of



any



exists

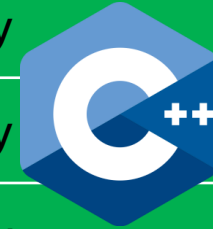


some



	Language	any_of
	C++	any_of
	Haskell	any
	Elixir	any
	Ruby	any
	D	any
	Rust	any
	F#	exists
	Clojure	some
	Kotlin	any
	Scala	exists
	Python	any
	Racket	-

	Language	any_of
	C++	any_of
	Haskell	any
	Elixir	any
	Ruby	any
	D	any
	Rust	any
	F#	exists
	Clojure	some
	Kotlin	any
	Scala	exists
	Python	any
	Racket	-



`std::any`



`class Any`



`any(/c)`



accumulate


























fold















reduce



	Language	reduce
	C++	accumulate/reduce
	Haskell	foldl
	Elixir	reduce
	Ruby	reduce
	D	fold/reduce
	Rust	fold
	F#	fold/reduce
	Clojure	reduce
	Kotlin	fold/reduce
	Scala	fold/reduce
	Python	reduce
	Racket	foldl

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	Racket	foldl



partial_sum



cumulativeFold



scan
















reductions



accumulate



	Language	scan
	C++	partial_sum
	Haskell	scanl
	Elixir	scan
	Ruby	-
	D	cumulativeFold
	Rust	accumulate
	F#	scan
	Clojure	reductions
	Kotlin	scanLeft
	Scala	scan
	Python	accumulate
	Racket	-

	Language	scan
	C++	partial_sum
	Haskell	scanl
	Elixir	scan
	Ruby	-
	D	cumulativeFold
	Rust	accumulate
	F#	scan
	Clojure	reductions
	Kotlin	scanLeft
	Scala	scan
	Python	accumulate
	Racket	-

count



count



count_if



























length



























freq array



	Language	count
	C++	count
	Haskell	frequency array
	Elixir	length & count_if
	Ruby	length / count / count_if
	D	count / count_if
	Rust	length
	F#	length
	Clojure	length
	Kotlin	length
	Scala	count_if
	Python	count
	Racket	length

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	Scala	count_if
	Python	count
	Racket	length

“Naming is hard.”

- Kate Gregory

 @gregcons


CppCon 2019: Kate Gregory “Naming is Hard: Let's Do Better”




Thank you!

<https://github.com/codereport/Talks/>

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#include