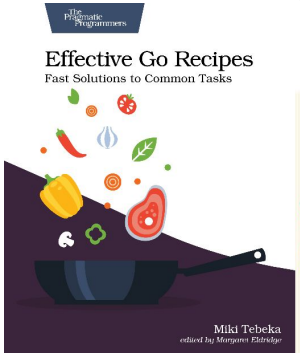
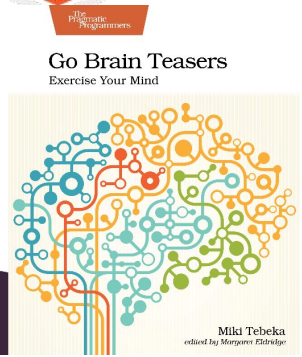
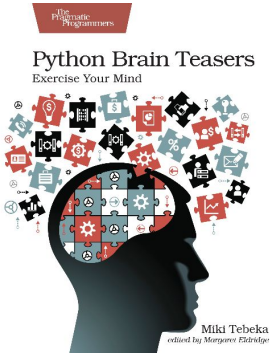
One Does Not Simply Iterate over Mordor

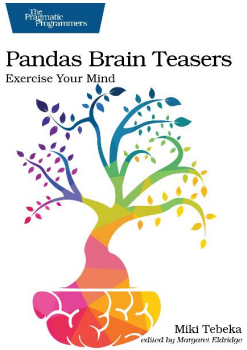
miki @tebeka

CEO,
CTO,
UFO









Range Over Function

Go 1.23, August 2024

Generators

Python 2.3, July 2003

CODE

tick/tick.go

Range-Over Functions in Go

ArdanLab Blog

Load logs from compressed JSON file.

```
$ zcat logs.json.gz| wc -l
5350200 16045852 770589508
$ zcat logs.json.gz| head -1
{"host":"199.72.81.55","time":
"1995-07-01T00:00:01Z","reques
t":"GET /history/apollo/
HTTP/1.0","status":200,"bytes"
:6245}
```

CODE

log/log.go

CODE

slice/slice.go

CODE

load

Map

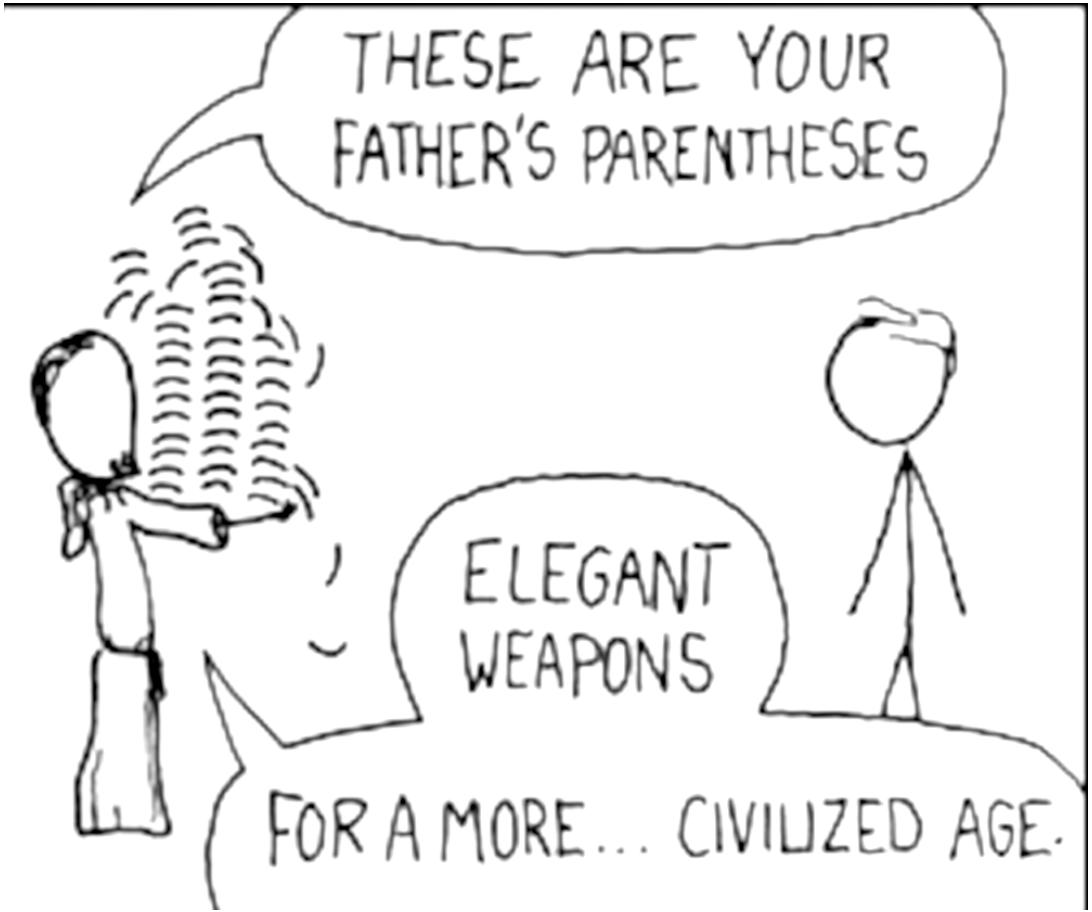
lower: ["Suite", "Up"] -> ["suite", "up"]

Filter

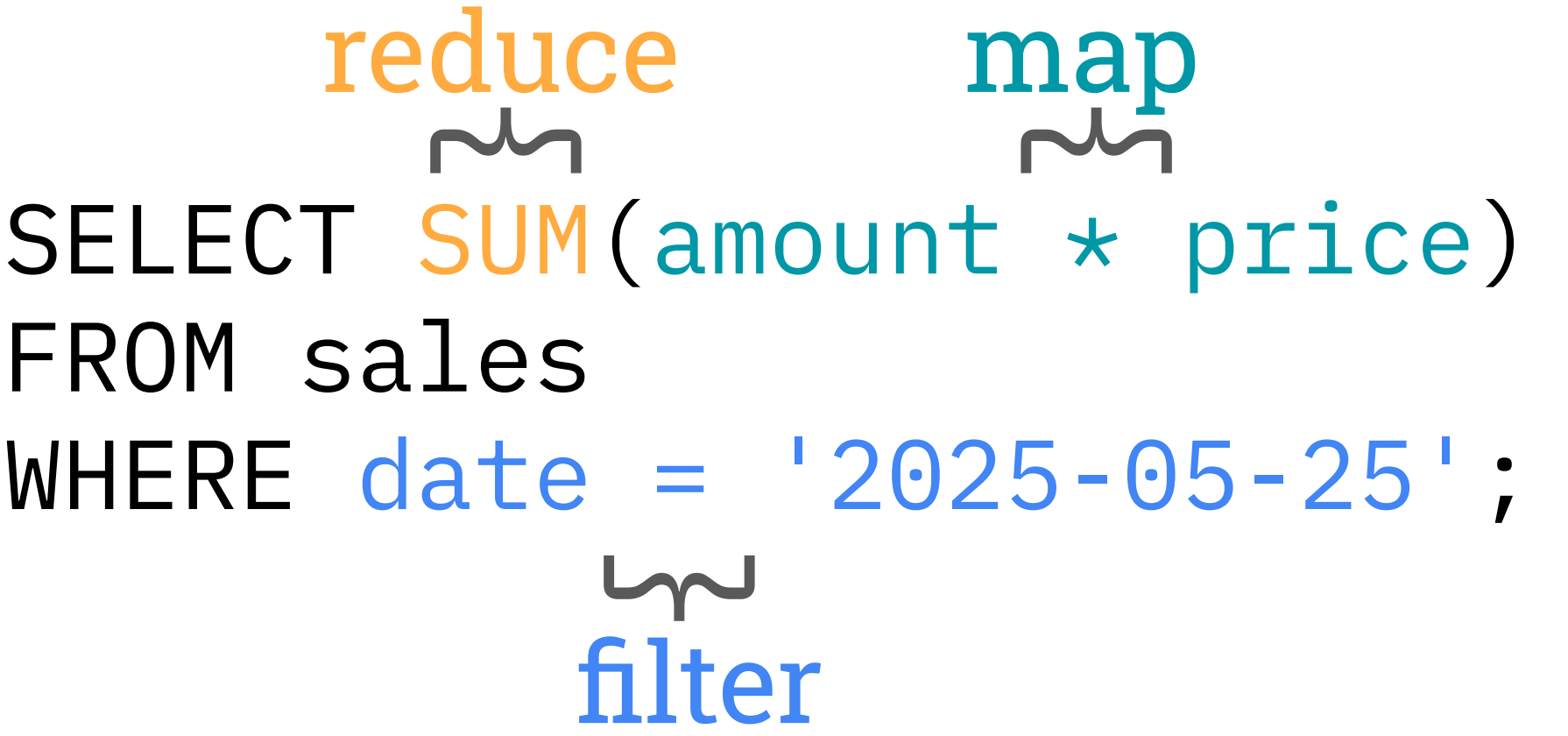
≥ 0: [2, -1, 3, 4] -> [2, 3, 4]

Reduce

sum: [1, 2, 3, 4] $\Rightarrow$ 10



https://xkcd.com/297/


reduce
map
SELECT SUM(amount * price)
FROM sales
WHERE date = '2025-05-25';
filter

CODE

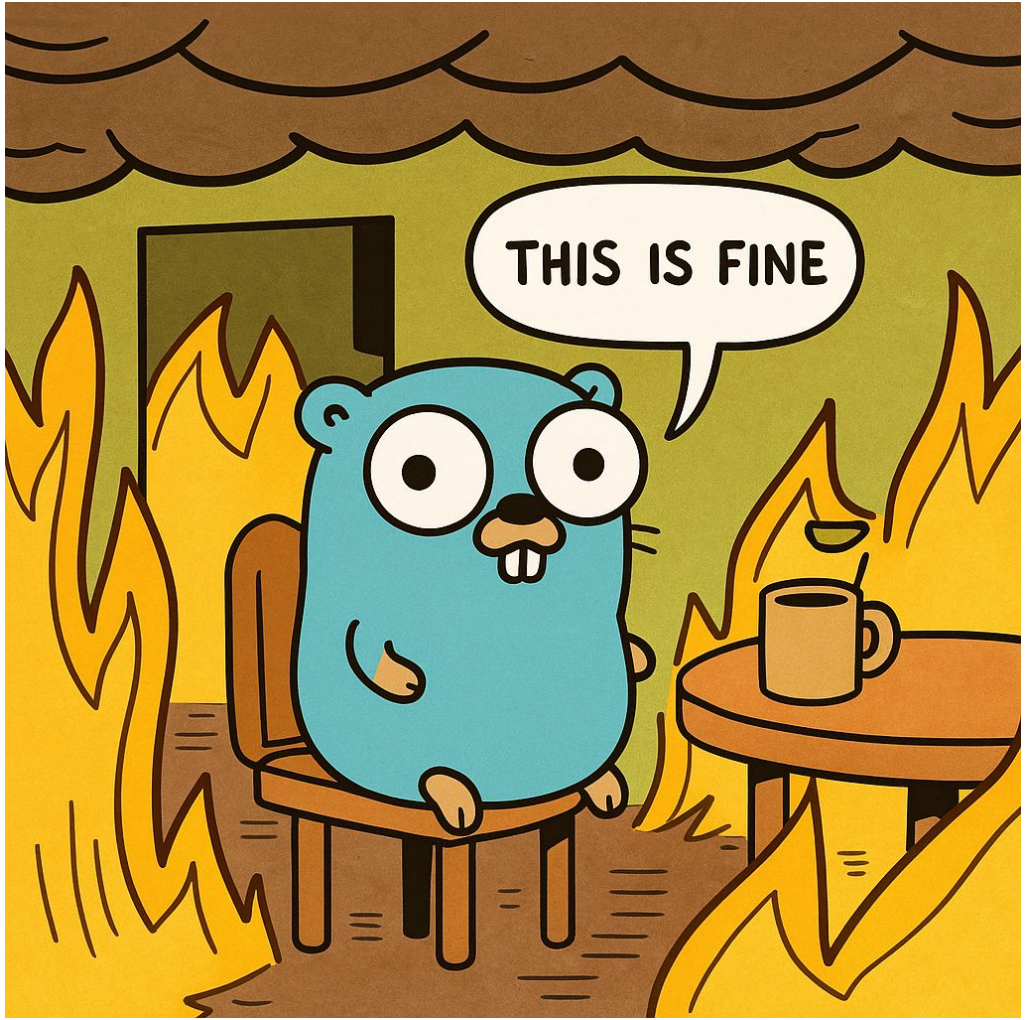
lazy/lazy.go

CODE

push/push.go

CODE

pull/pull.go


THIS IS FINE

CODE

fibs/fibs.go

CODE

order/order.go

CODE

leak/leak.go

CODE

range/range.go

Questions?

github.com/tebeka/talks/tree/main/gcil-2025