Street magic with functions

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Functional programming
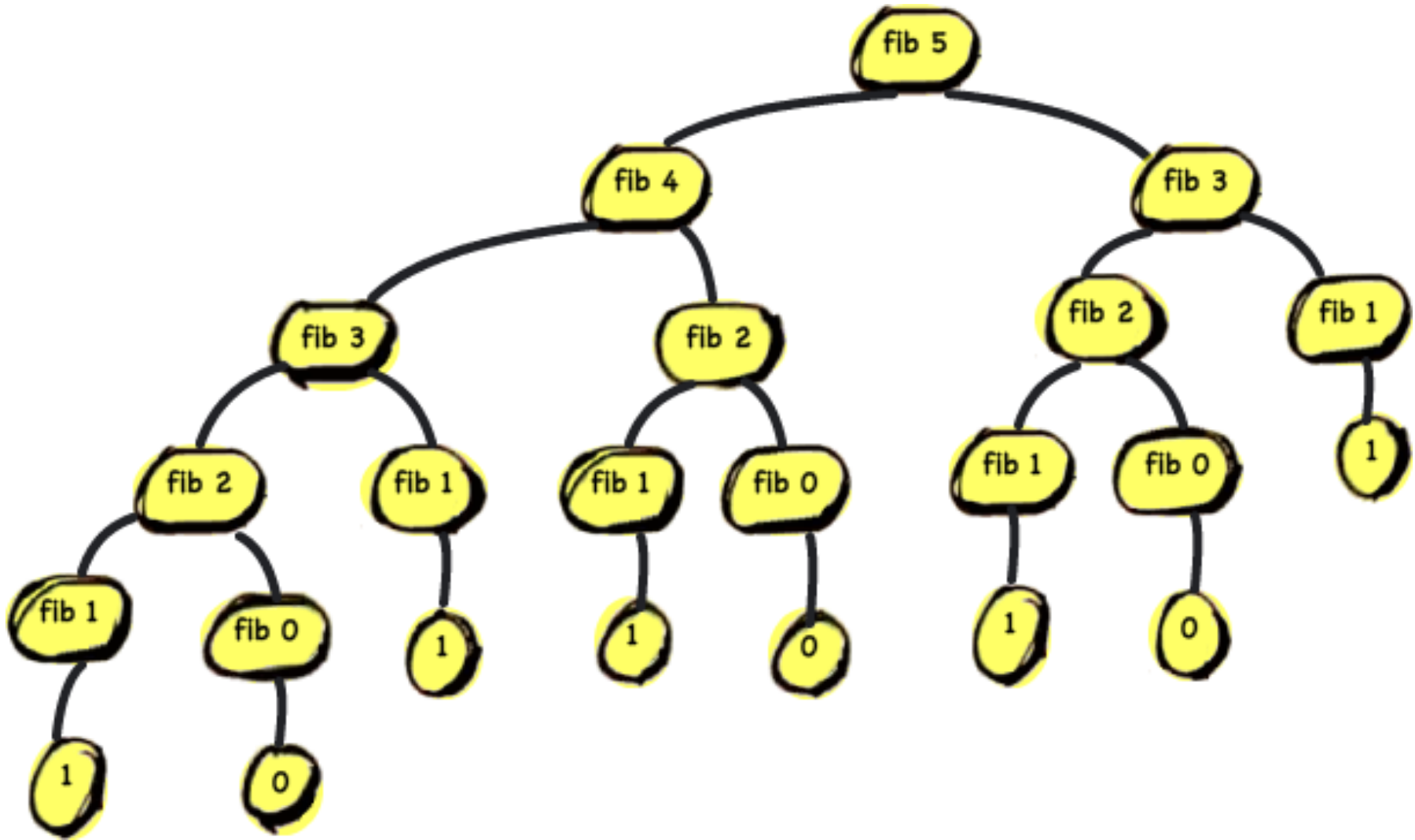
- First-class and higher-order functions
- Referential transparency
- Immutable data
- No state
- No side effects

Enough talking
Show me

Iterating without do-while, while, for, or for-in

Tree recursion

linear recursion
(recursive) linear iteration
tree recursion

Loops?
We don't need no stinkin' loops!

Now,
what about the recursion itself?

We couldn't have done the trick
without recursion, right? *Right?*

Oh yes we could! And that's

Y

Links

1. David Blaine's Street Magic parody: http://youtu.be/wTqsV3q7rRU
2. Values and Change — Clojure's approach to Identity and State: http://clojure.org/state
3. Execution in the Kingdom of Nouns: http://steve-yegge.blogspot.com/2006/03/execution-in-kingdom-of-nouns.html
4. Structure and Interpretation of Computer Programs: http://mitpress.mit.edu/sicp/
5. The Y Combinator (Slight Return), or: How to Succeed at Recursion Without Really Recursing: http://mvanier.livejournal.com/2897.html
6. This presentation: https://github.com/ikr/street-magic-with-functions