Scheme

Announcements

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- "The greatest single programming language ever designed."

  –Alan Kay, co-inventor of Smalltalk and OOP (from the user interface video)

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(Demo)

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Scheme Interpreters

(Demo)

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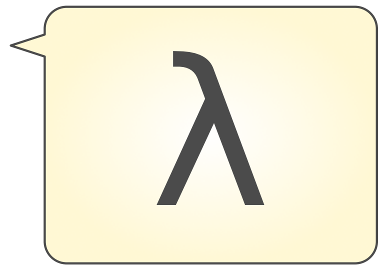

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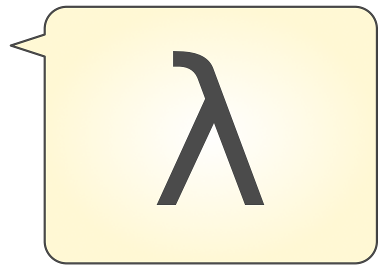

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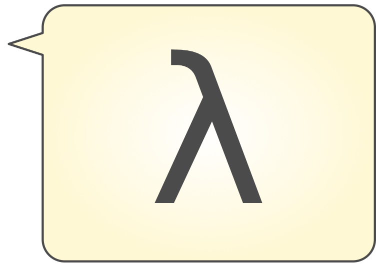

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▶ 12

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Sierpinski's Triangle

(Demo)

More Special Forms

Cond & Begin

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if x > 10:
    print('big')
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The cond special form that behaves like if–elif–else statements in Python

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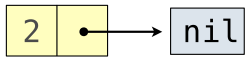

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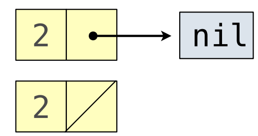

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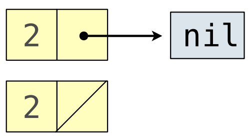

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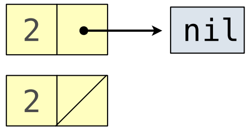

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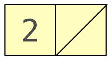

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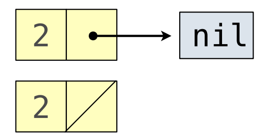

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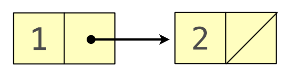

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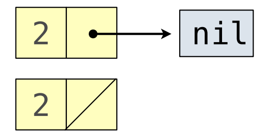

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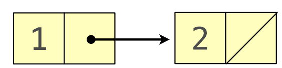

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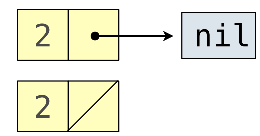

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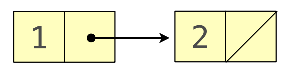

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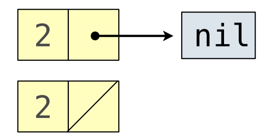

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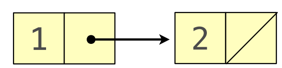

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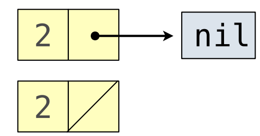

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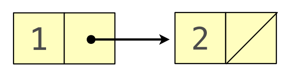

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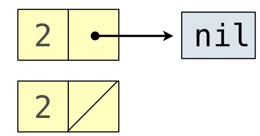

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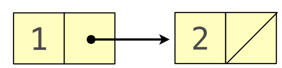

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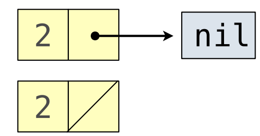

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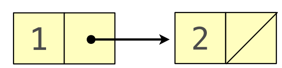

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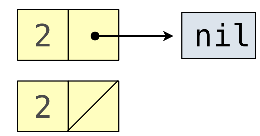

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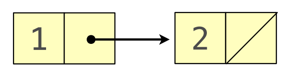

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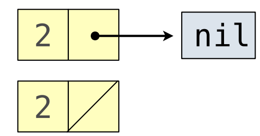

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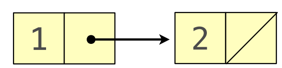

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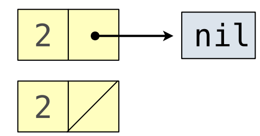

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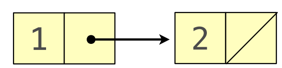


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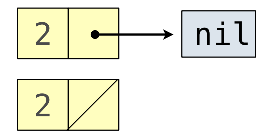

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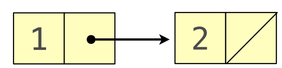

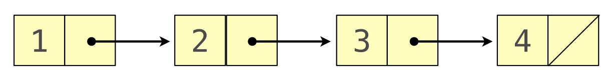

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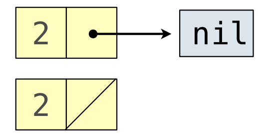

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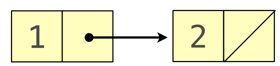

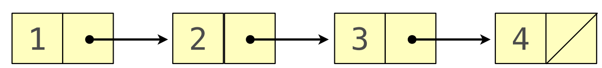

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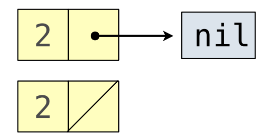

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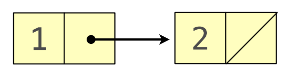

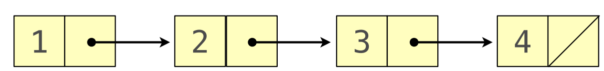

(Demo)

Symbolic Programming

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Symbols normally refer to values; how do we refer to symbols?

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(Demo)

Programs as Data

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(Demo)

Generating Code

Quasiquotation

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(Demo)