61A Lecture 18

Friday, March 6

Announcements

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  - Fill out conflict form if you cannot attend due to a course conflict

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Excellent participation!

51 qualified submissions

Lots of excellent ideas

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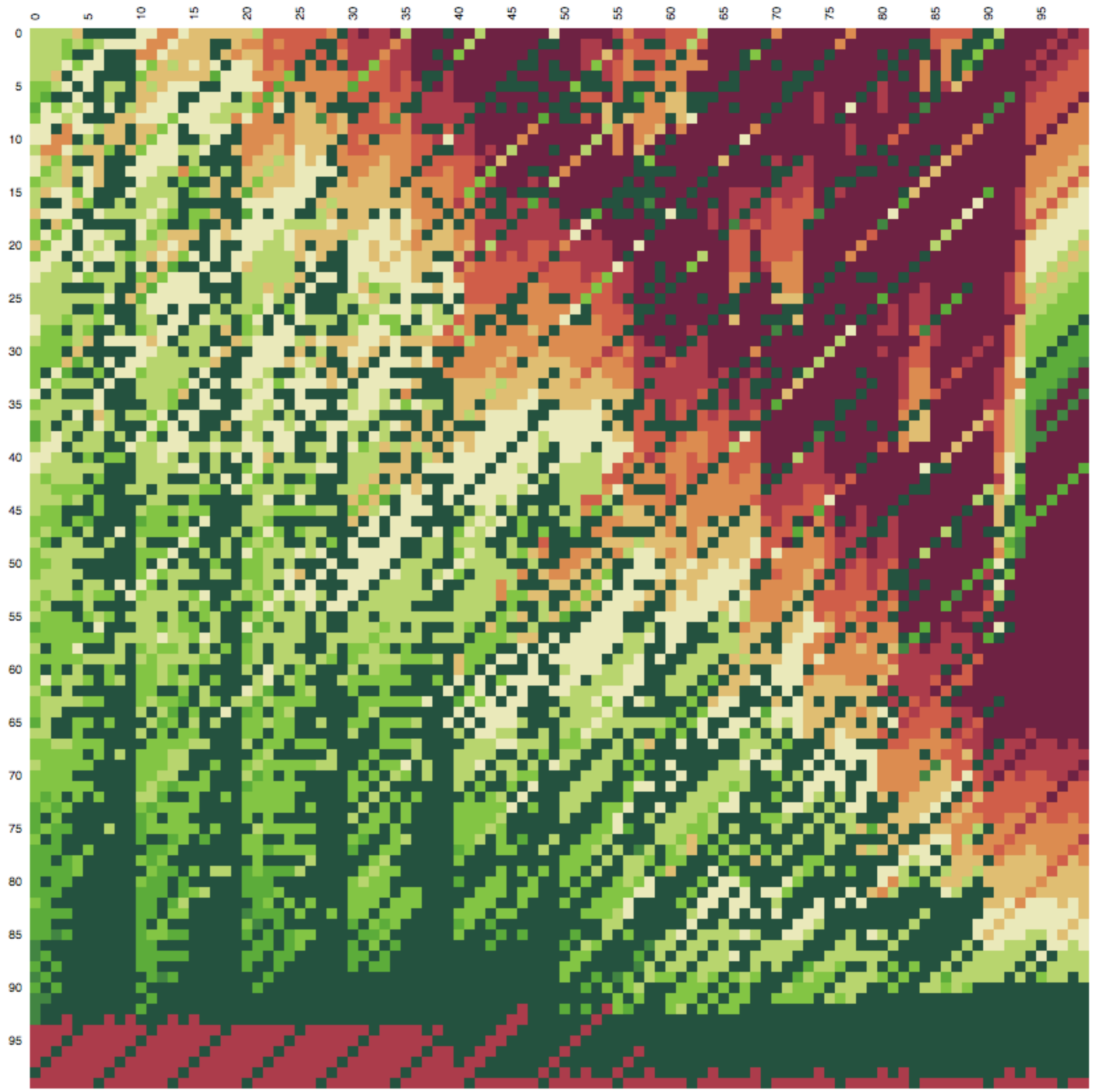

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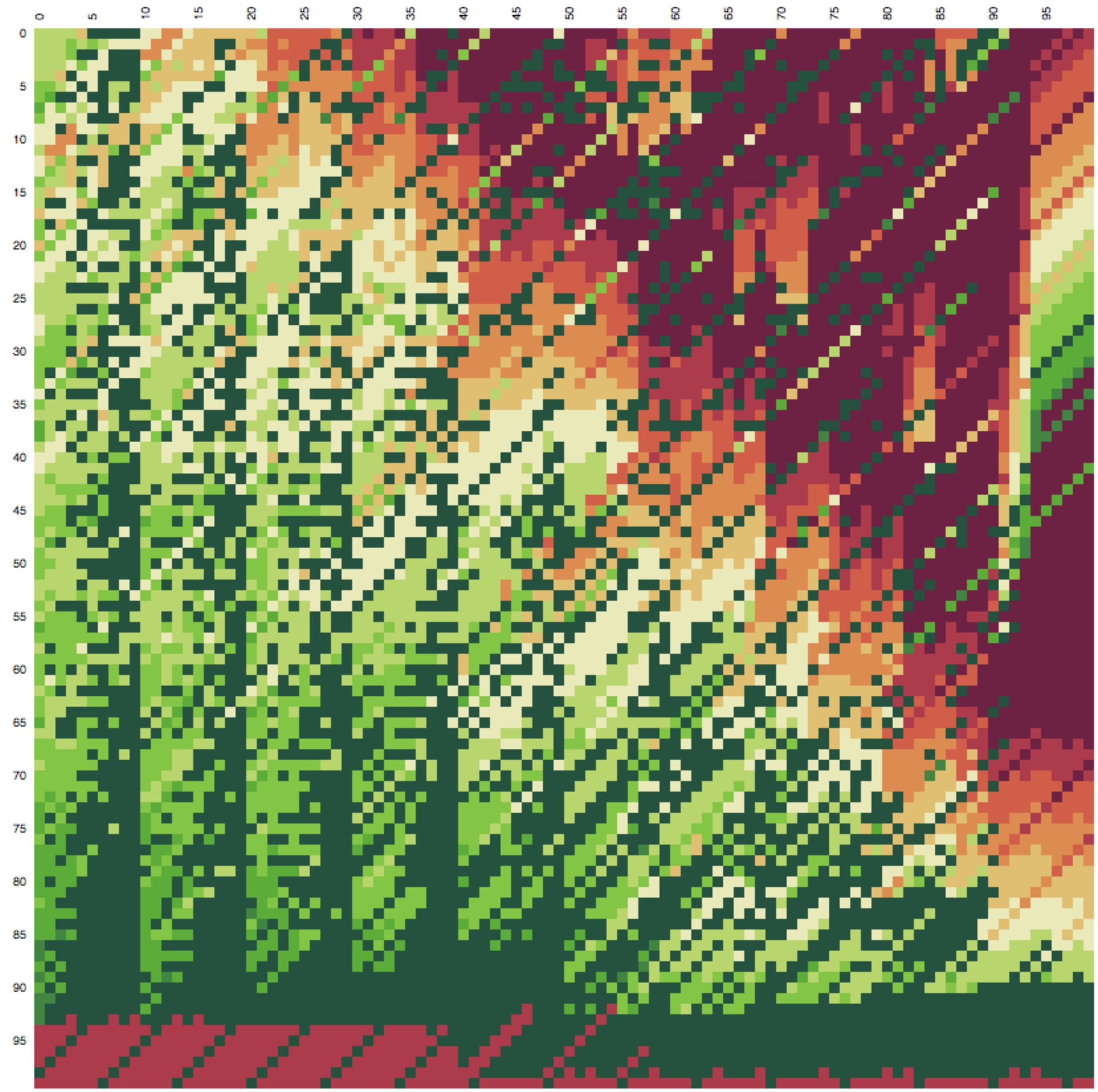
(Results)



Type Coercion

Review: Type Dispatching Analysis

Minimal violation of abstraction barriers: we define cross-type functions as necessary.

Extensible: Any new numeric type can "install" itself into the existing system by adding new entries to the cross-type function dictionaries

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    """Return complex equal to rational."""
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Question: Is coercion exact?

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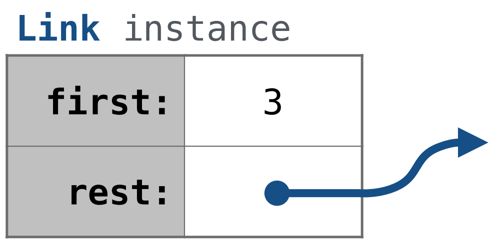

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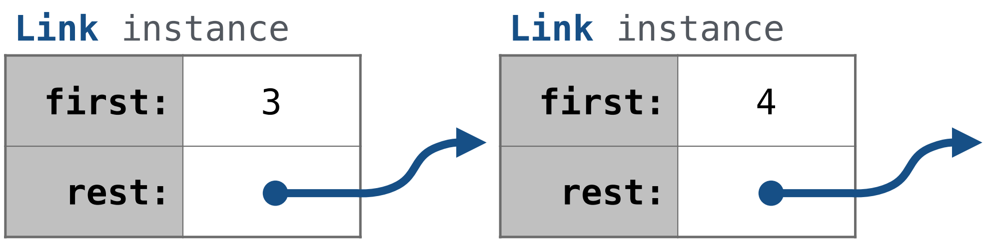

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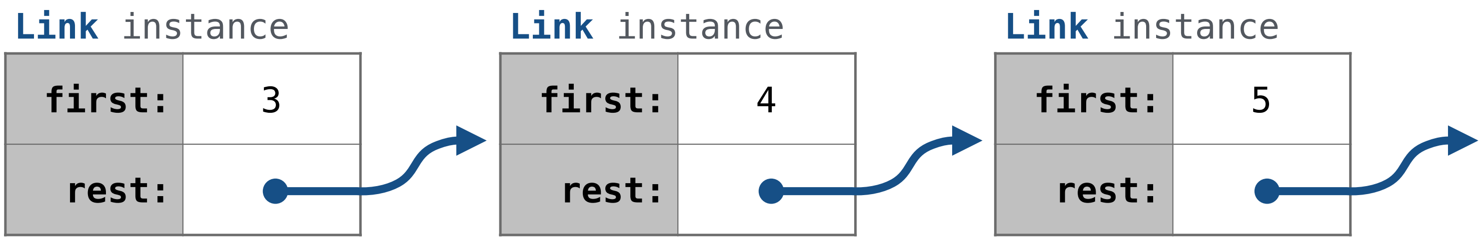

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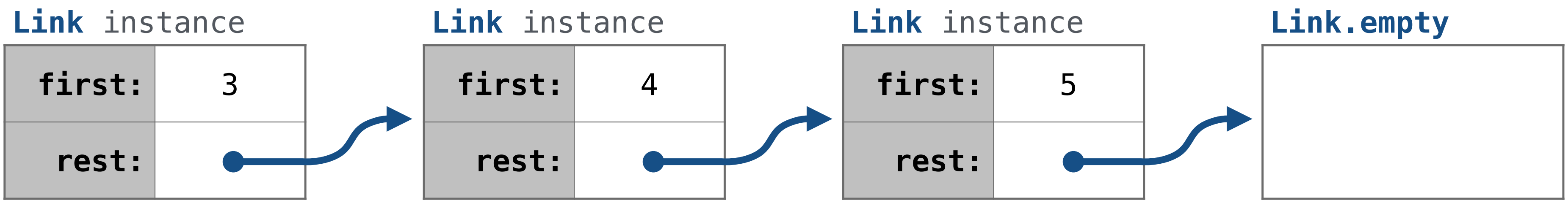

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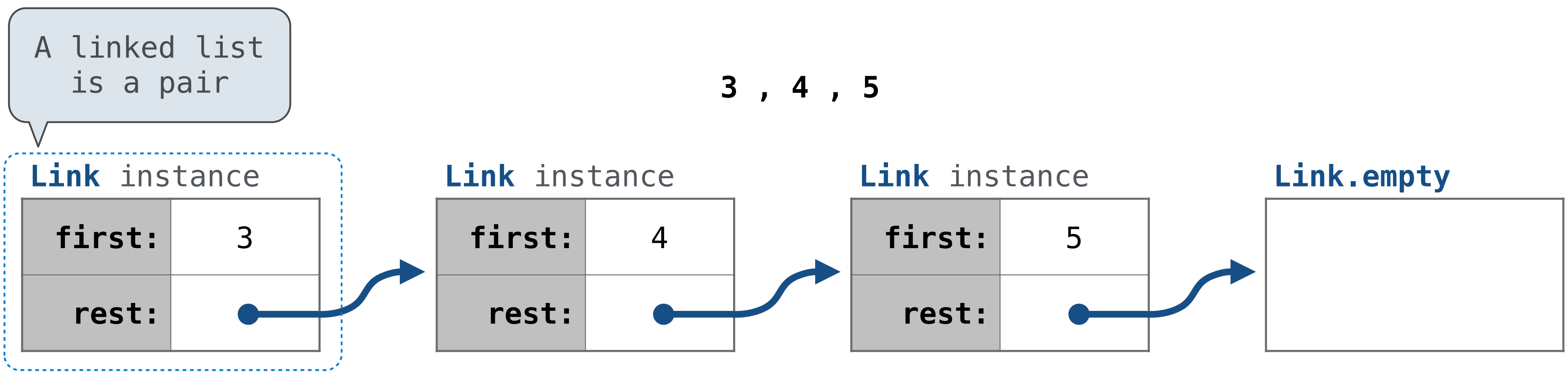

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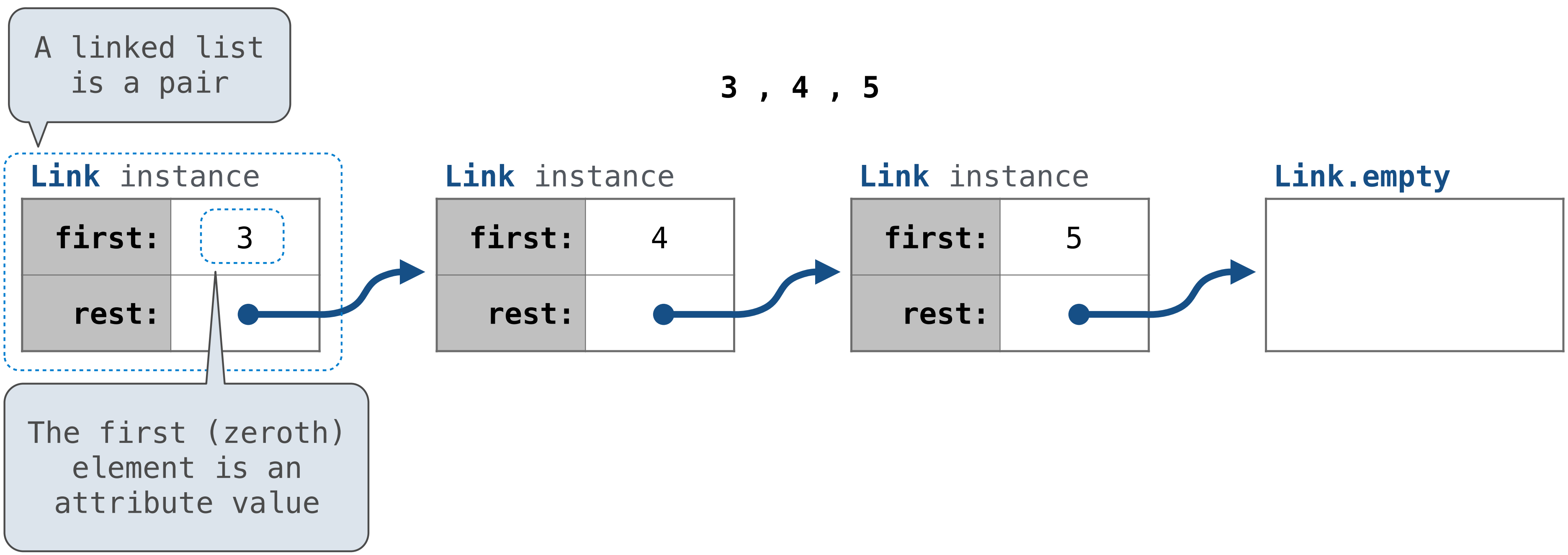

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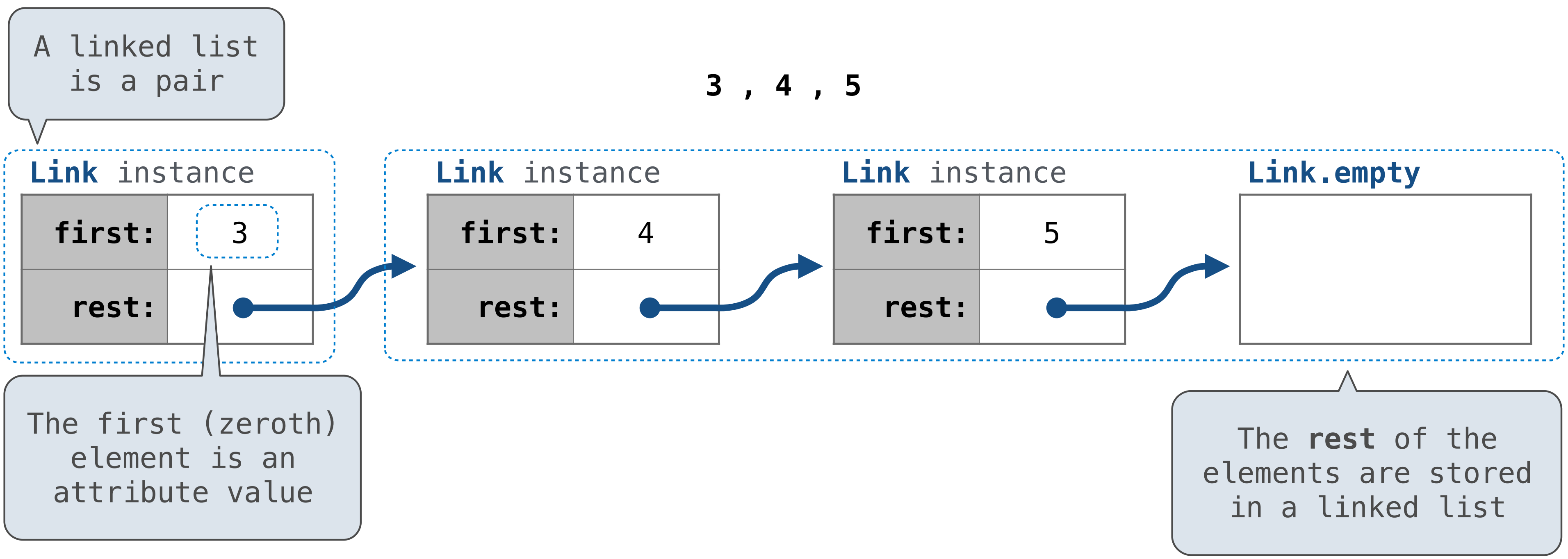

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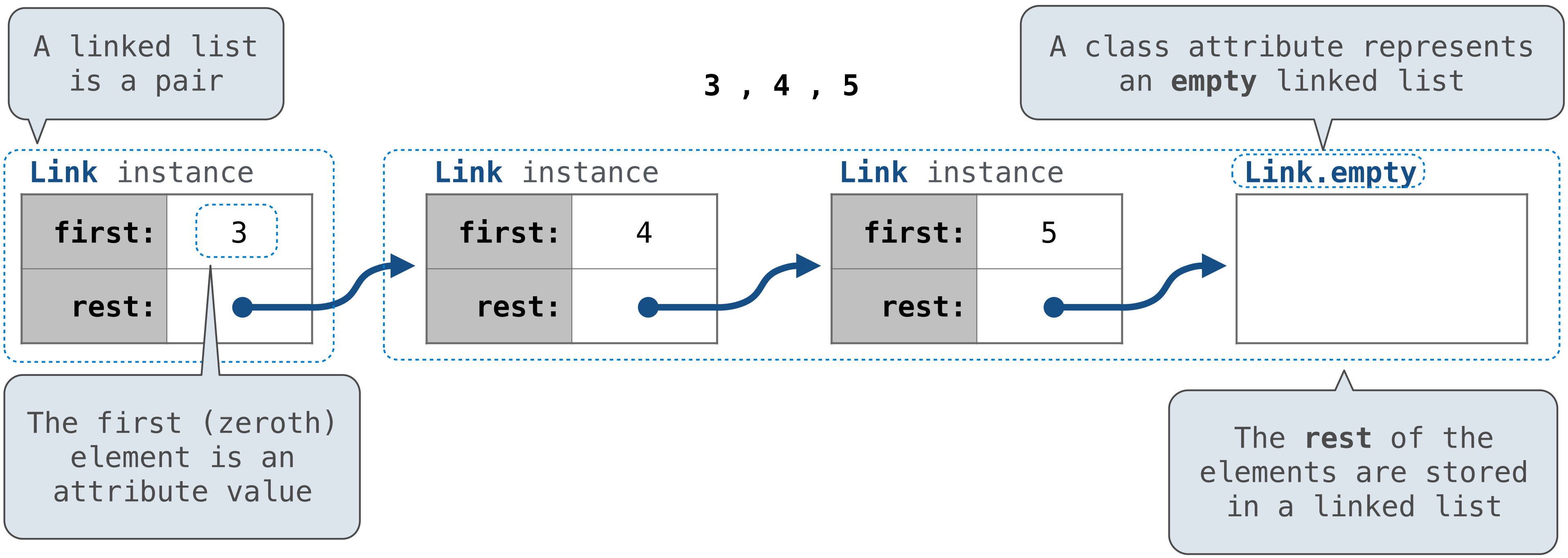

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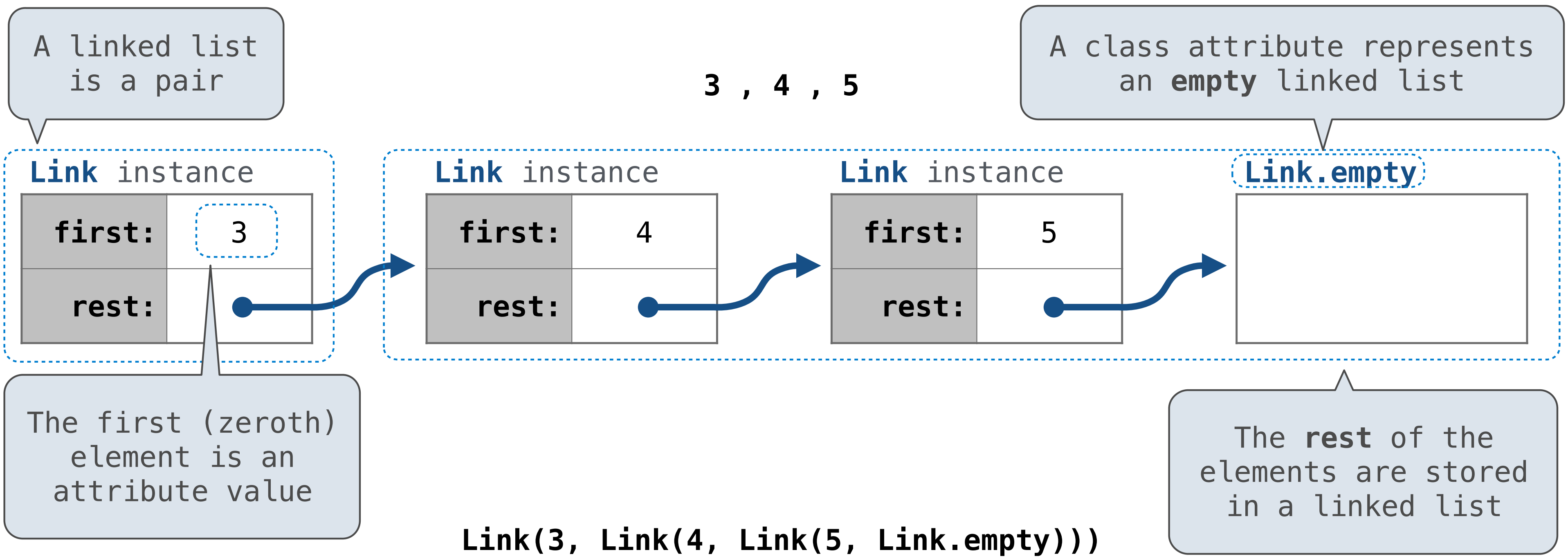

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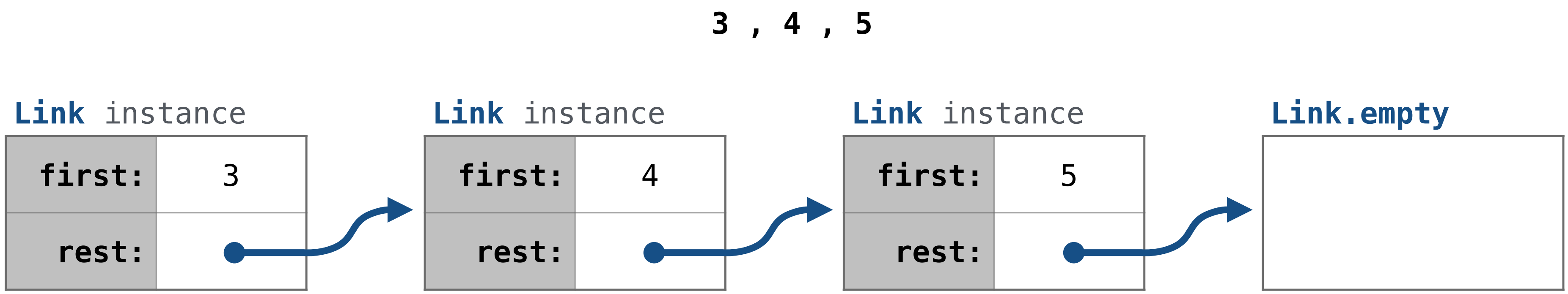


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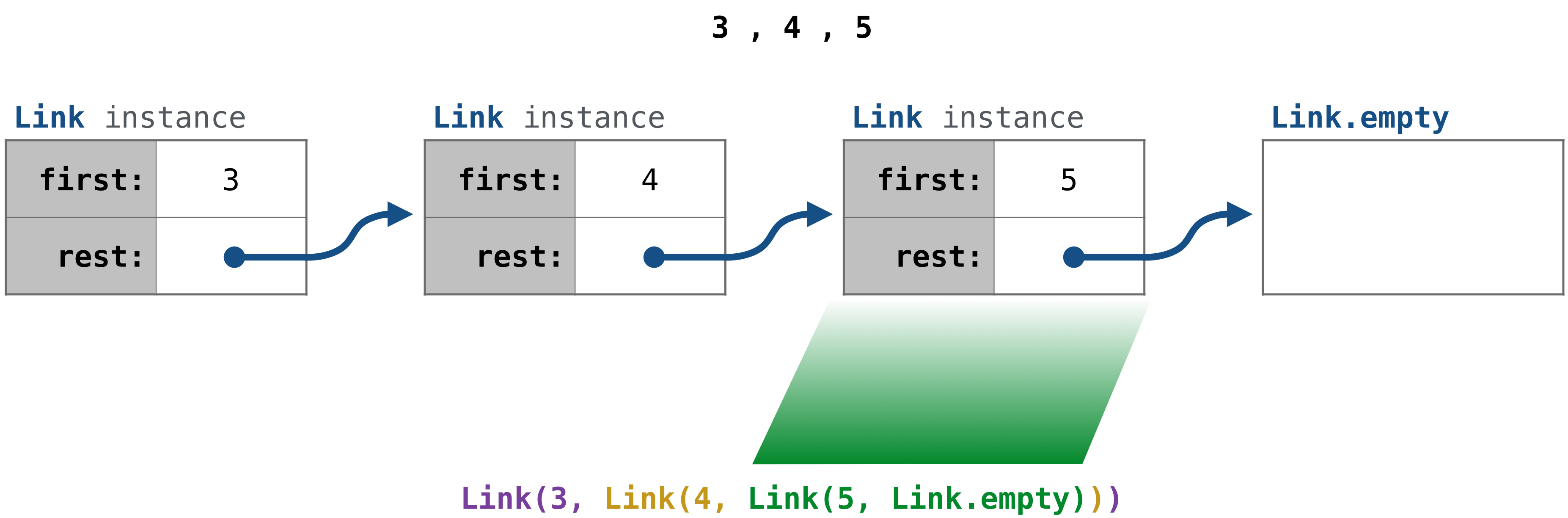

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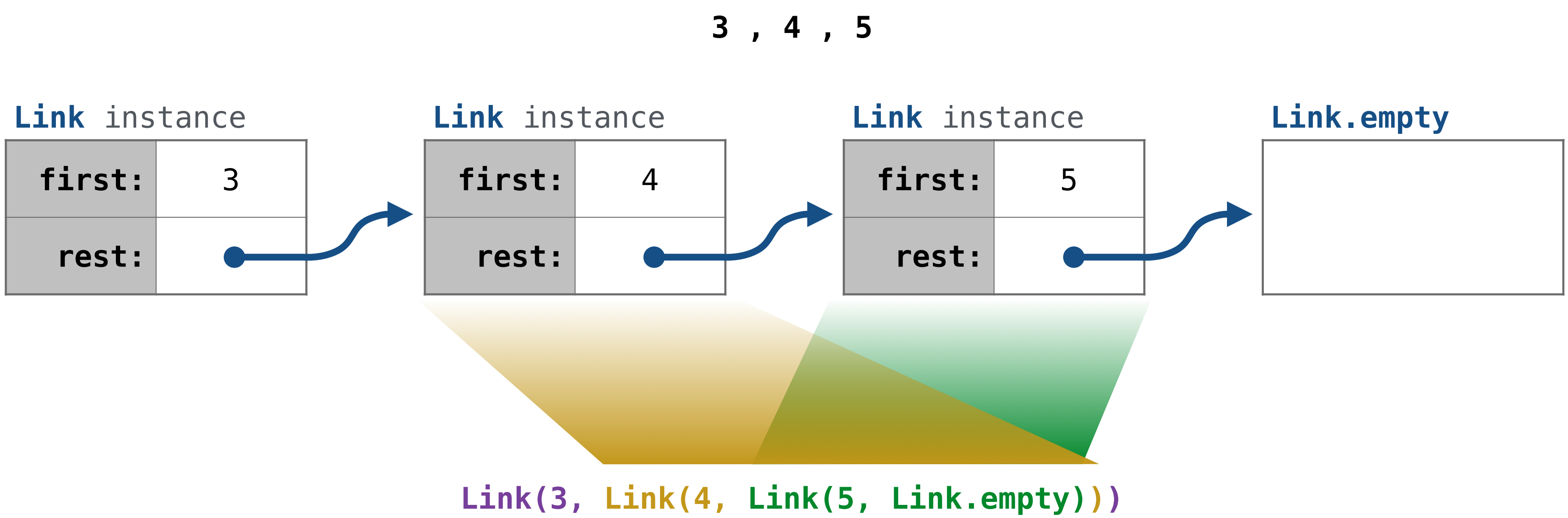

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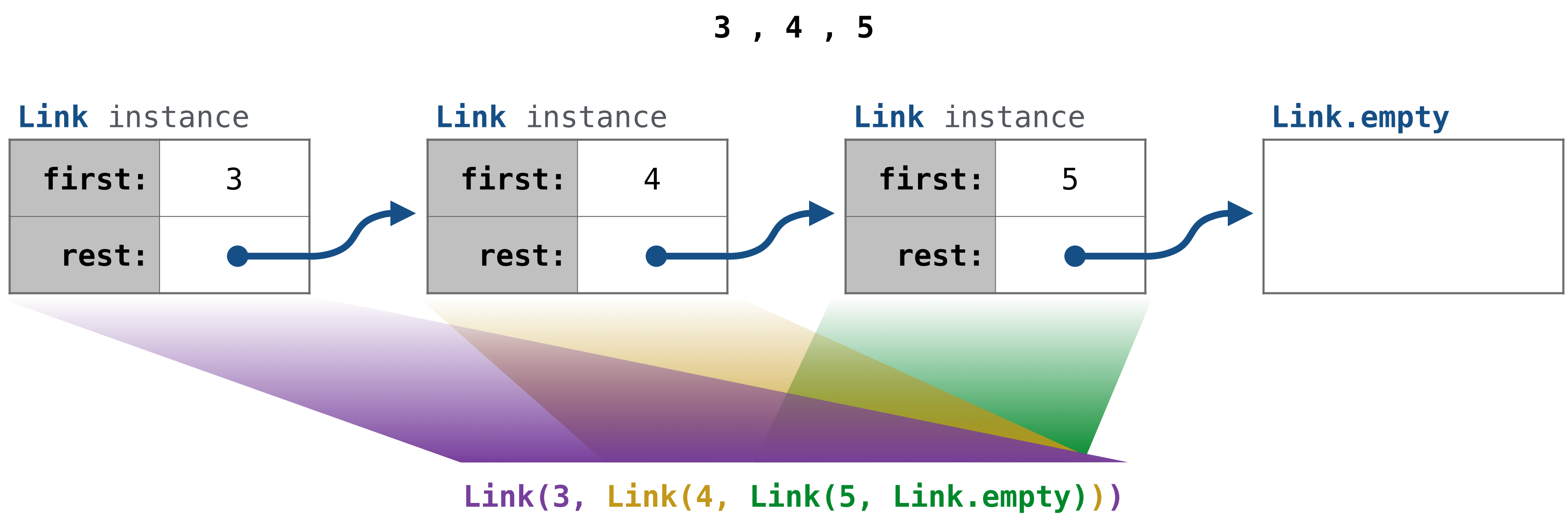

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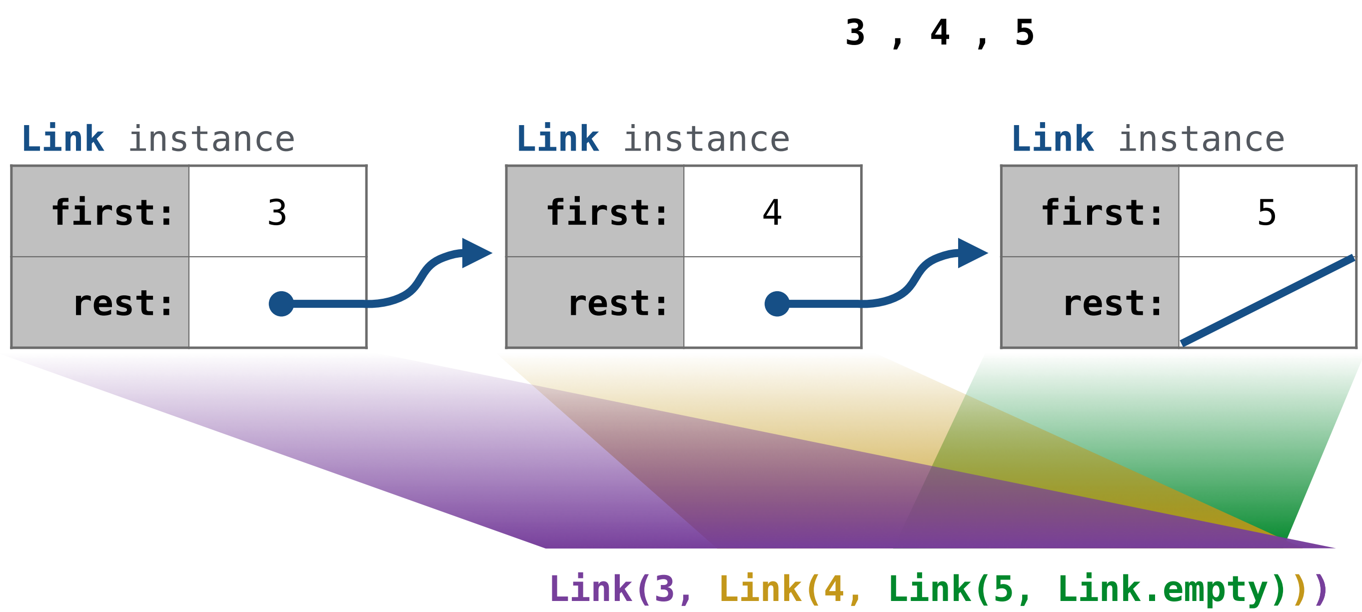

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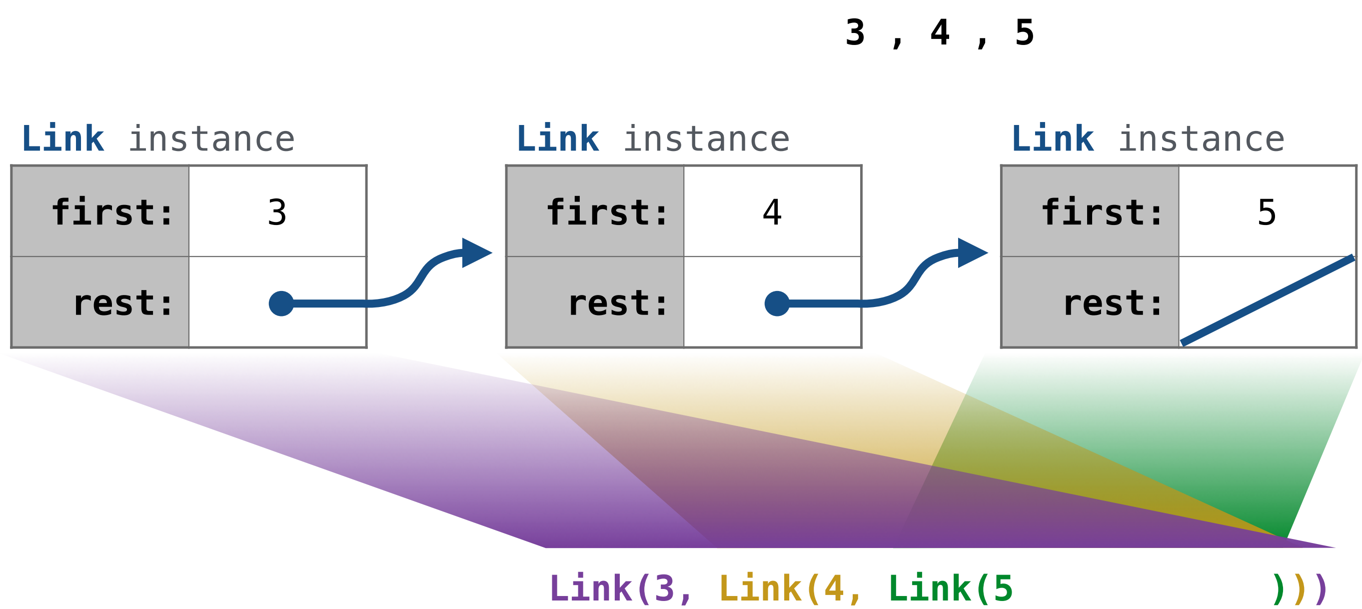

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(Demo)

Sequence Operations

Linked List Class

More special method names:

`__getitem__`	Element selection []
`__len__`	Built-in len function

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Calls this method (`__getitem__`)

This element selection syntax (`[i-1]`)

Recursive call to `__len__` (`len(self.rest)`)

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Recursive call to __len__

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Methods can be recursive too!

(Demo)

Linked List Processing

(Demo)