Implementing User-level Value-weak Hashtables

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Key	Value
'a	"Something"
'b	"Something Too"

What are Hashtables?

Get   Put   Update   Delete

Key	Value
'a	"Something"
'b	"Something Too"

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Get Put Update Delete

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Get   **Put**   Update   Delete

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What are Hashtables?

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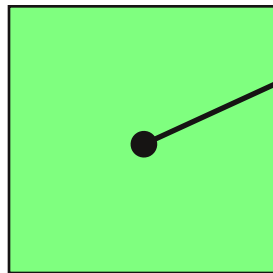| Key	Value
'a	"Something"
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What are Hashtables?

Get   Put   Update   Delete

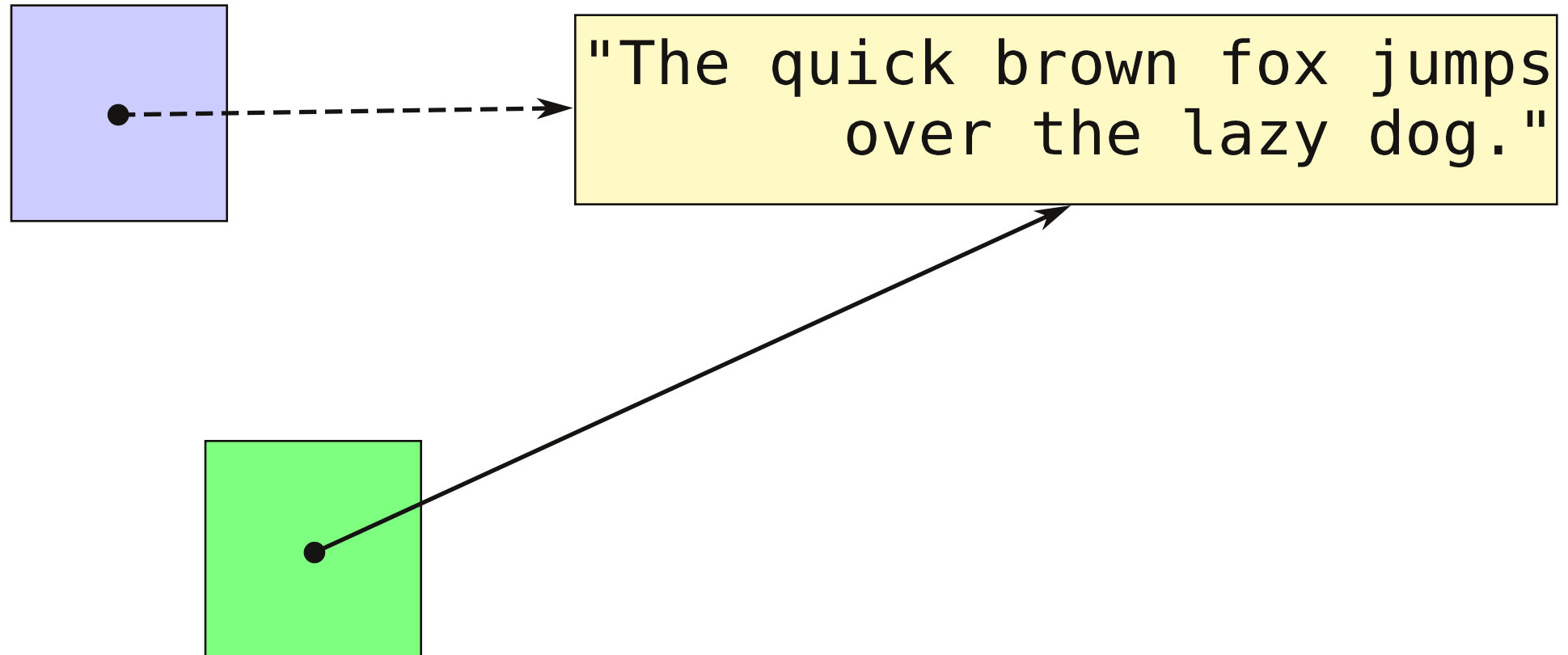# What are Weak References?

> "The quick brown fox jumps over the lazy dog."
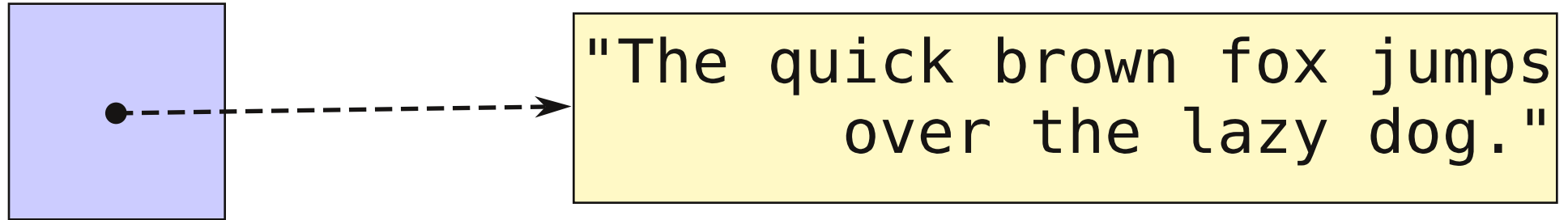
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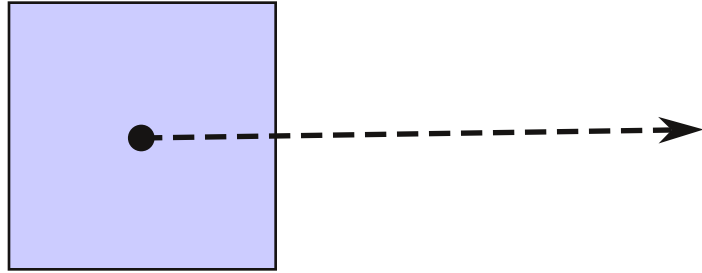
What are Weak References?

What are Weak References?

#!BWP

Value-weak Tables, Round 1

Key	Value
'a	"Something"
'b	"Nothing"

Value-weak Tables, Round 1

Key	Value
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Value-weak Tables, Round 1

Key	Value
'a	"Something"
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Guardians to the Rescue

Any reasonable GC hook (such as Gambit's Wills or a capable finalizer mechanism) will work, too.
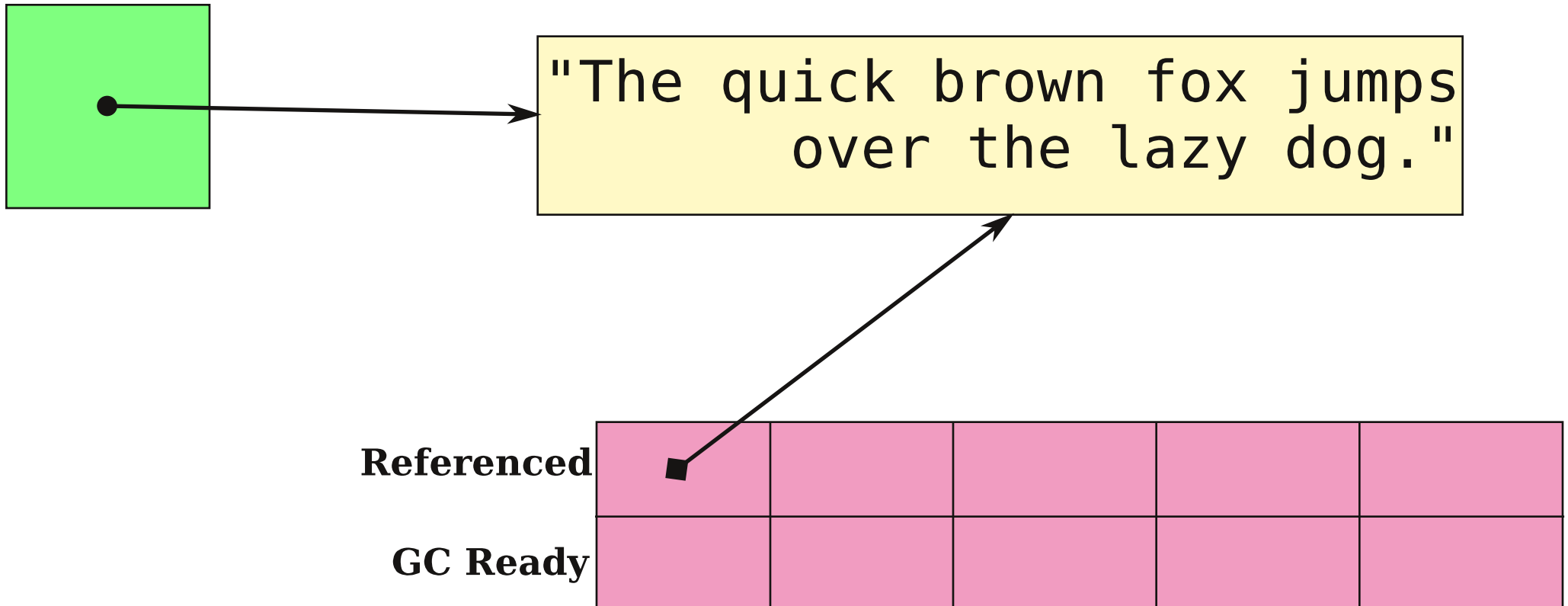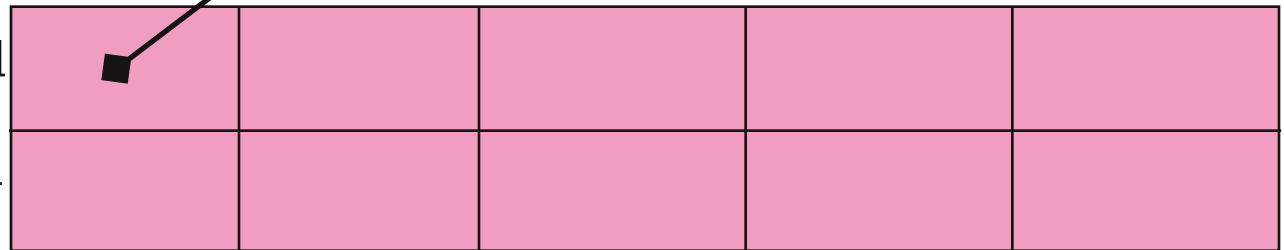
Guardians to the Rescue

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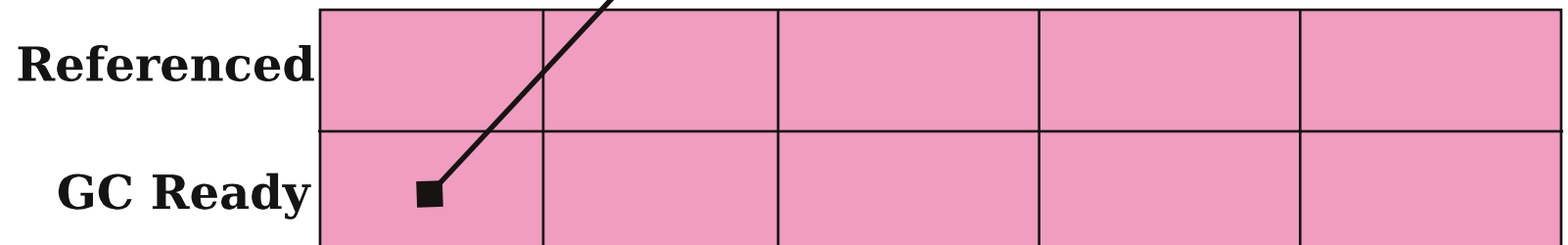"The quick brown fox jumps over the lazy dog."

Referenced

GC Ready

Guardians to the Rescue

Any reasonable GC hook (such as Gambit's Wills or a capable finalizer mechanism) will work, too.

Value-weak Tables, K.O.

Key	Value
'a	"Something"
'b	"Nothing"

Key	Value
"Something"	clean-a
"Nothing"	clean-b

Referenced

GC Ready

Value-weak Tables, K.O.
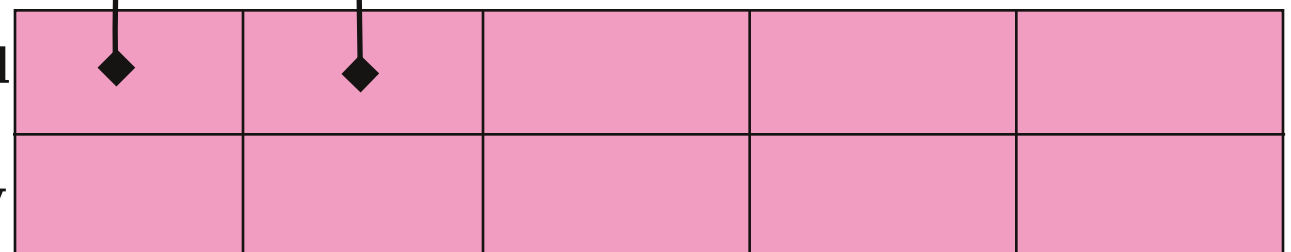
Value-weak Tables, K.O.

Key	Value
'a	#!BWP
'b	"Nothing"

Key	Value
"Nothing"	clean-b

clean-a

Referenced				
	◆			
GC Ready ◆				
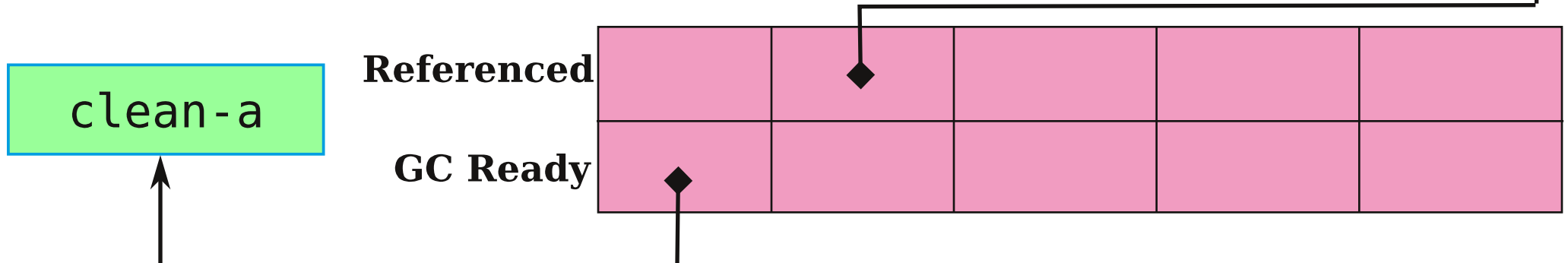
Questions, Clarification, and Discussion…