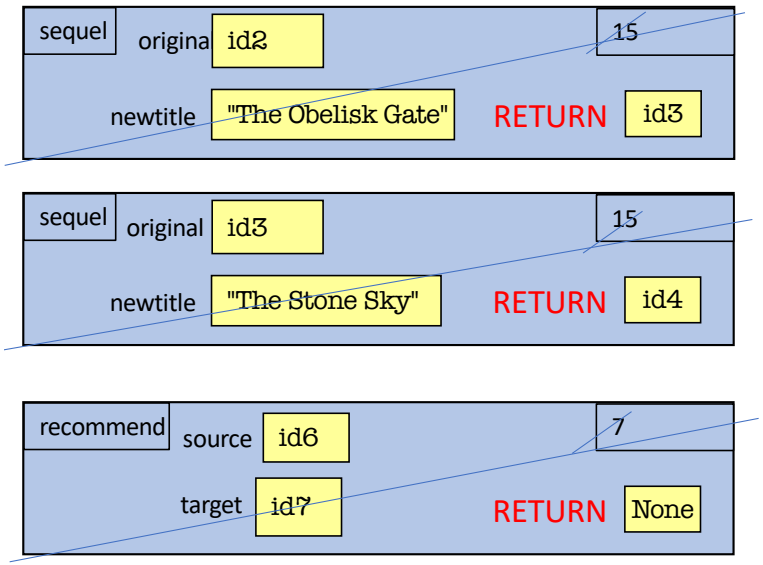
# Global Space

bsg id1 fs id2 og id3 ss id4

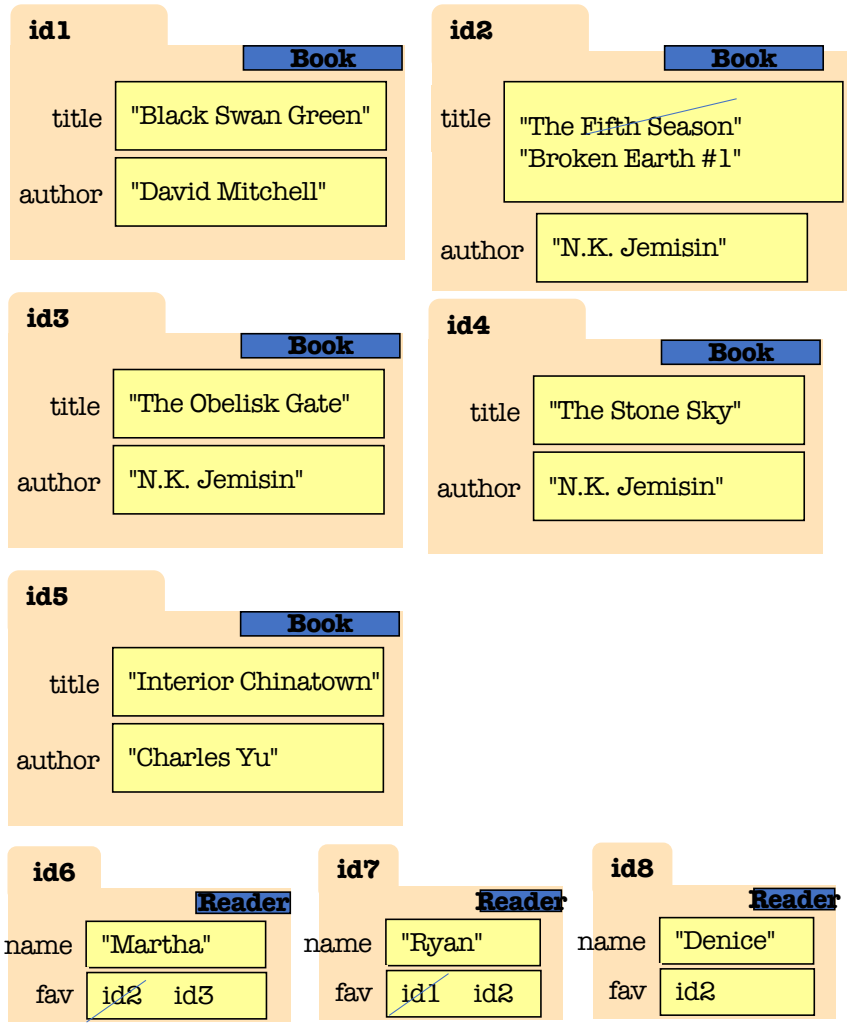
ic id5 book1 ~~id2~~ id5

martha id6 ryan id7 denice id8

# Call stack (growing downwards)




# Heap Space




Q1
m.v.t: "The Fifth Season"
r.v.t: ”Black Swan Green"
d.v.t.: ”The Fifth Season”

Q2
m.v.t: "The Fifth Season"
r.v.t: "The Fifth Season"
d.v.t.: "The Fifth Season”

Q3
m.v.t: "The Fifth Season"
r.v.t: "The Fifth Season"
d.v.t.: "The Fifth Season”

Q4
m.v.t: "The Obelisk Gate"
r.v.t: "The Fifth Season"
d.v.t.: "The Fifth Season”

Q5
m.v.t: "The Obelisk Gate"
r.v.t: "Broken Earth #1"
d.v.t.: "Broken Earth #1”

## Global Space

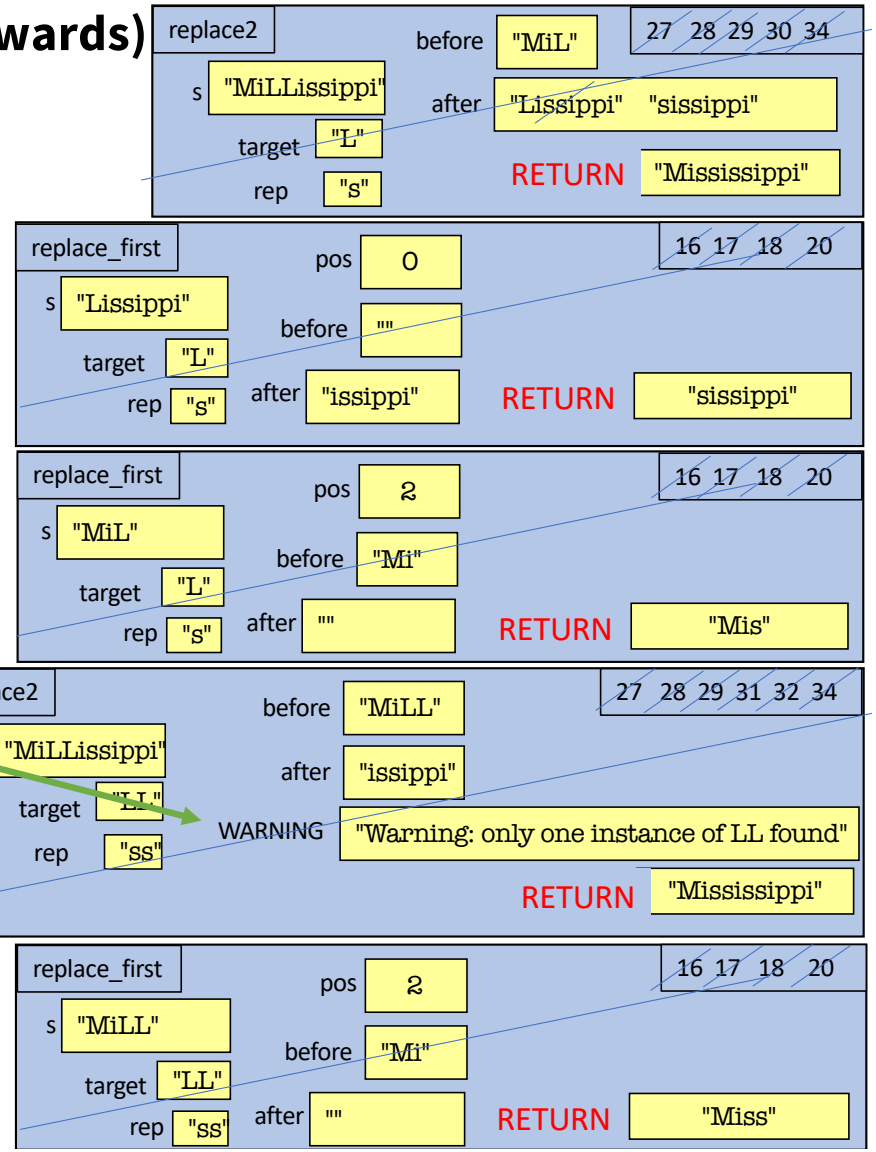
WARNING ""

x "MiLLissippi"

y "Mississippi"

z "Mississippi"

## Call stack (growing downwards)




*Note that line 32 in* `replace2` *appears to be an attempt to change the value of global variable* `WARNING`*, but actually creates a local variable* `WARNING` *within* `replace2`*'s frame.*

*Different programming languages have different rules/policies about whether/how functions can alter global variables; it's worth remembering this point.*

The spring 2021 CS1110 course staff has the following additional book recommendations for you!

Suggestions from Irene Hung:
*Dune* by Frank Herbert for scifi (movie's coming out too!)
*The Way of Kings* by Brandon Sanderson (fantasy)
*Children of Blood and Bone* by Tomi Adeyemi (ya fantasy)

Memoirs suggested by Priya Malla:
*Maybe You Should Talk to Someone*, by Lori Gottlieb;
*Born a Crime,* by Trevor Noah;
*Long Walk to Freedom*, by Nelson Mandela.

Suggestions from Ben Rosenberg for those looking for directly CS-related books:
*Gödel, Escher, Bach,* by Douglas Hofstadter
*The C Programming Language,* by Brian Kernighan and Dennis Ritchie