

# Data Structures

## Stack – Array Implementation

Team Emertxe



# Stack – Array Implementation



# Operations



Create Stack

Insert an Element

Delete an Element

Stack – pop(stack,element)

# pop(stack,element)



## Input Specification:

stack : Pointer that contains address of structure variable (stack\_t)

element : Pointer that contains address of an integer variable

## Output Specification:

Status : e\_true / e\_false

# pop(stack, element)



size = 4

40	item[3]
30	item[2]
20	item[1]
10	item[0]

item

capacity

4

top

3

```
if(is_stack_empty(stack))
    return e_false
element = stack → item[stack → top]
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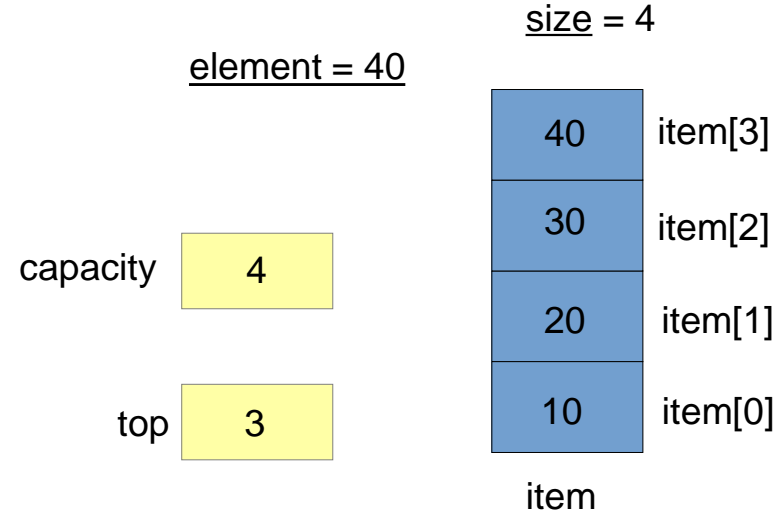
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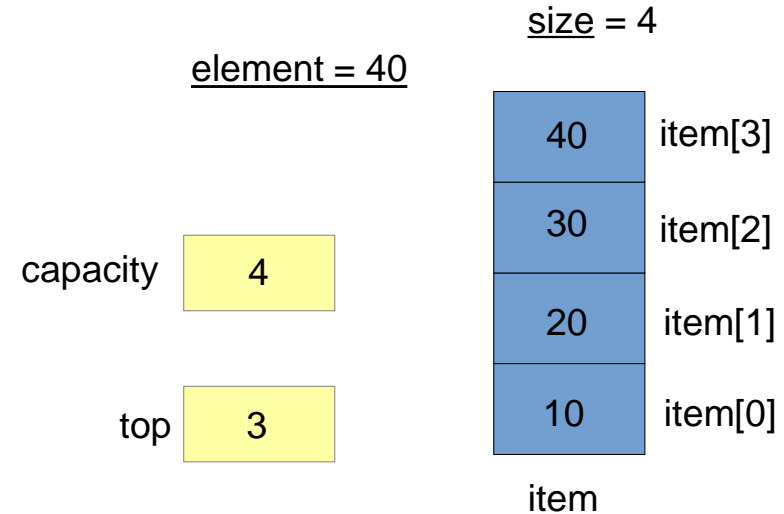
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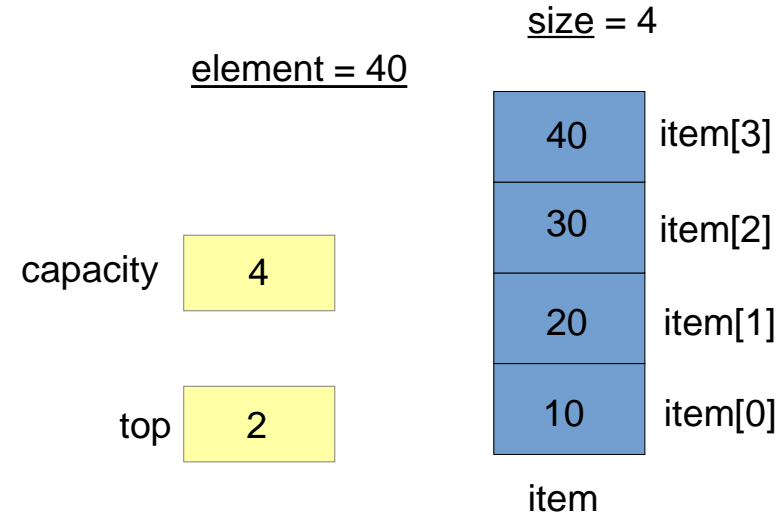
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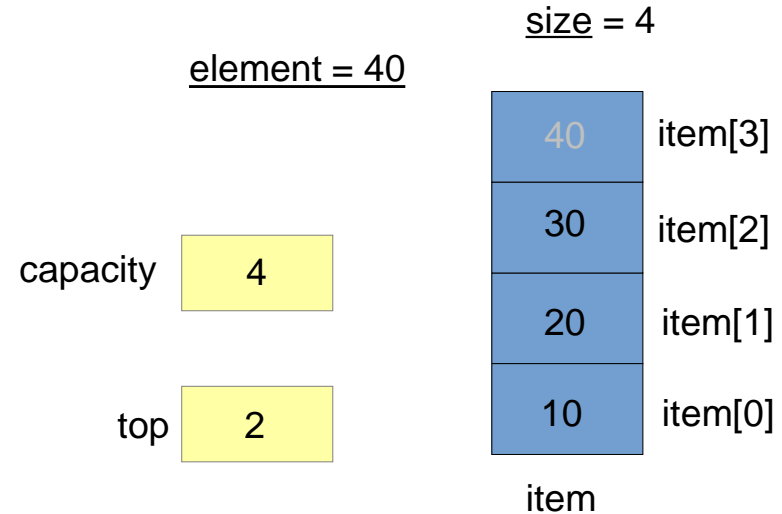
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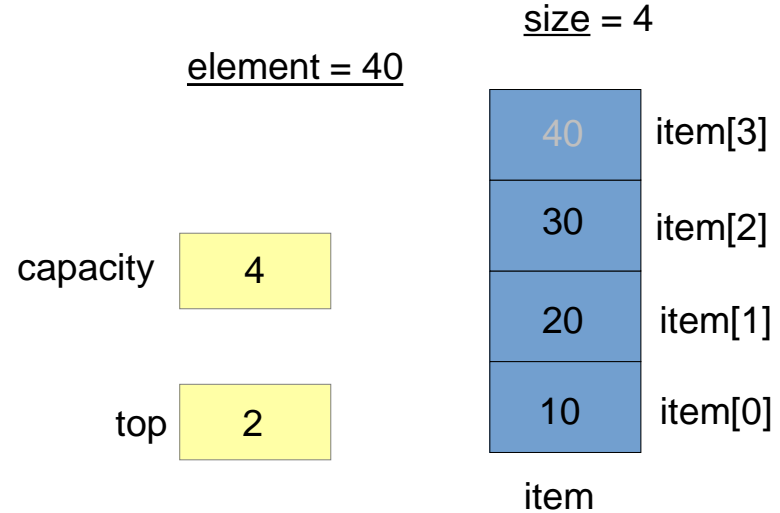
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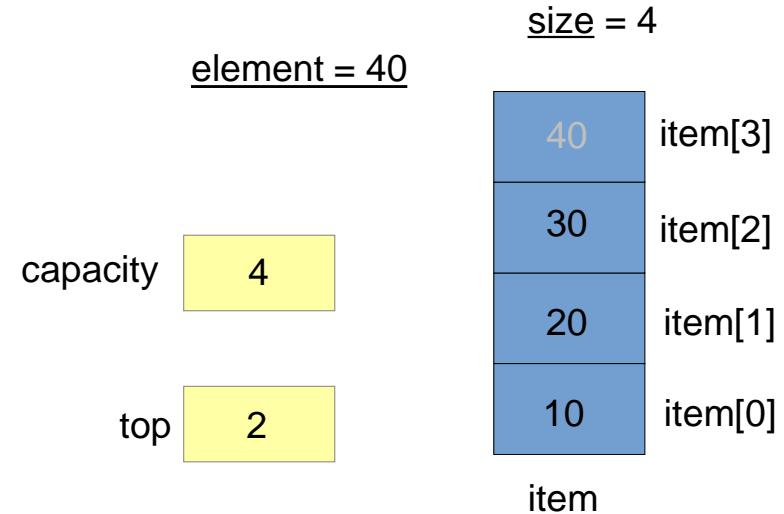
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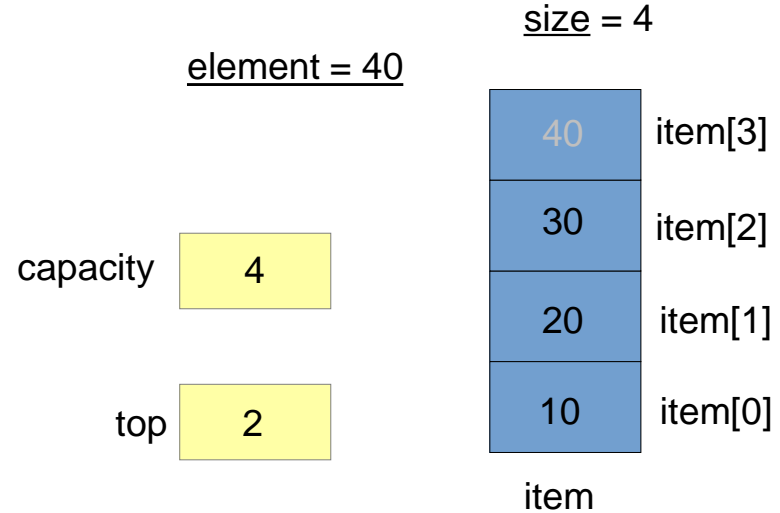
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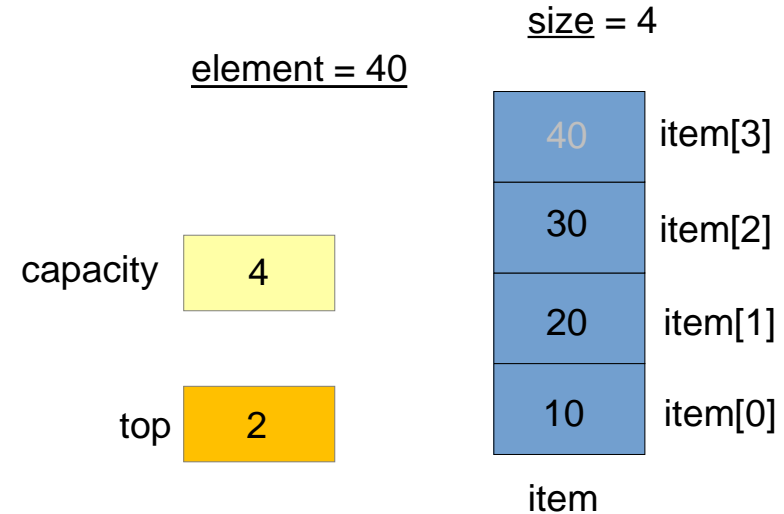
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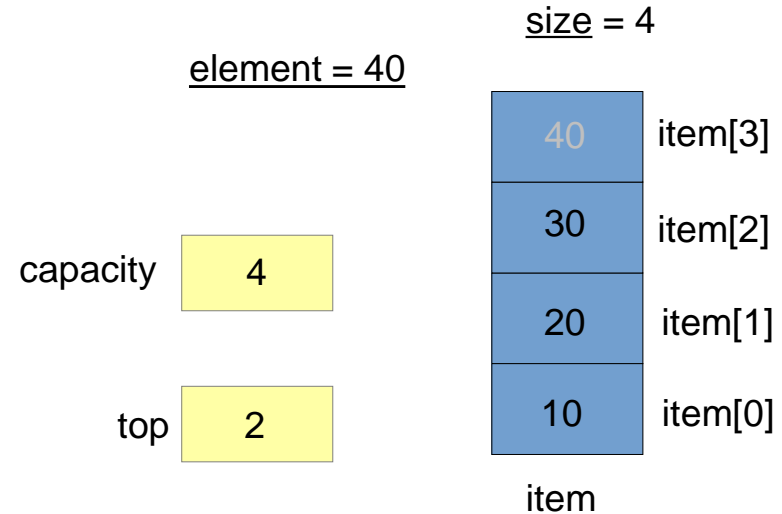
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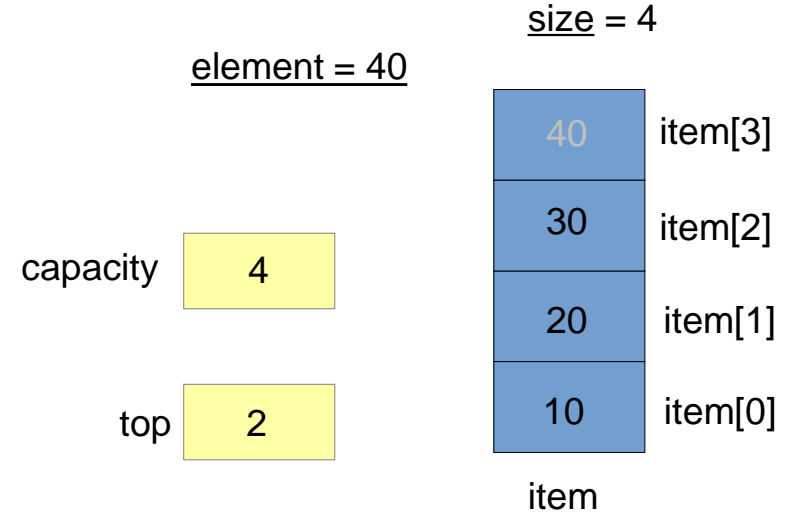
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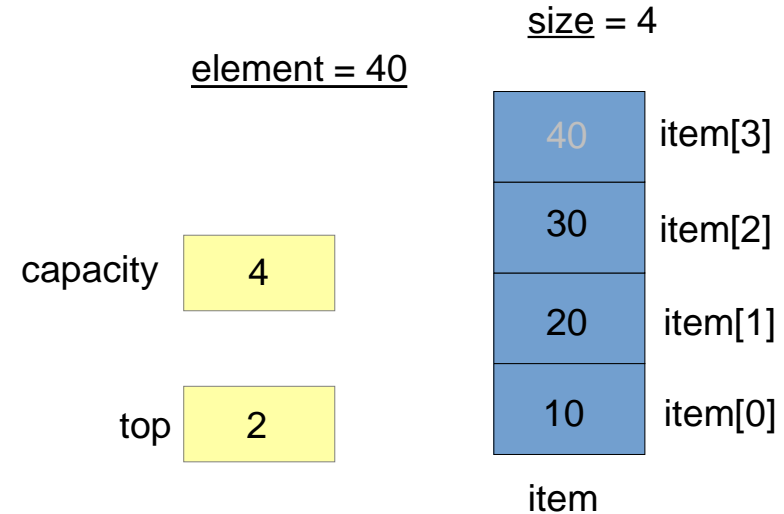
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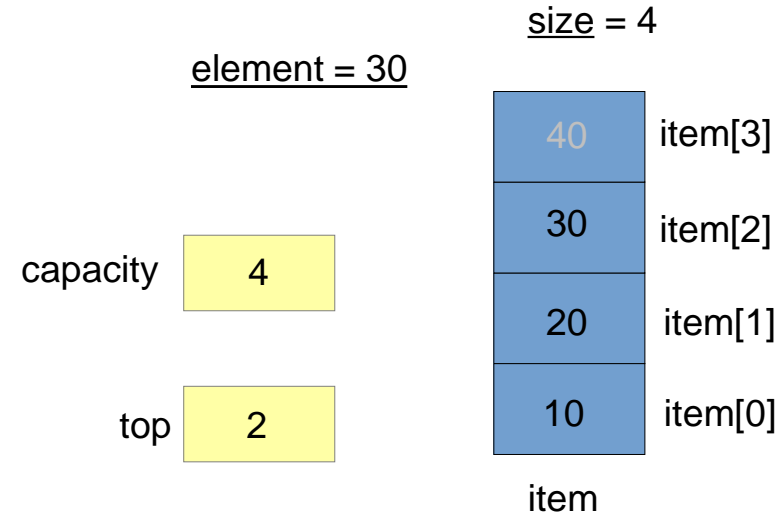
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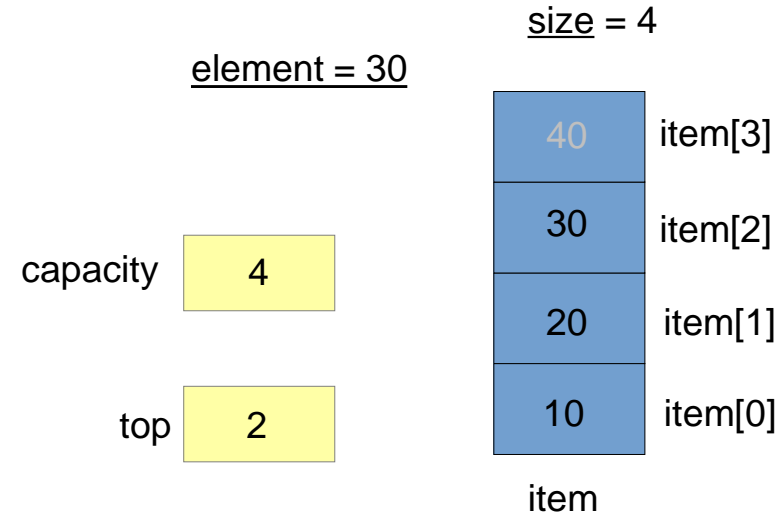
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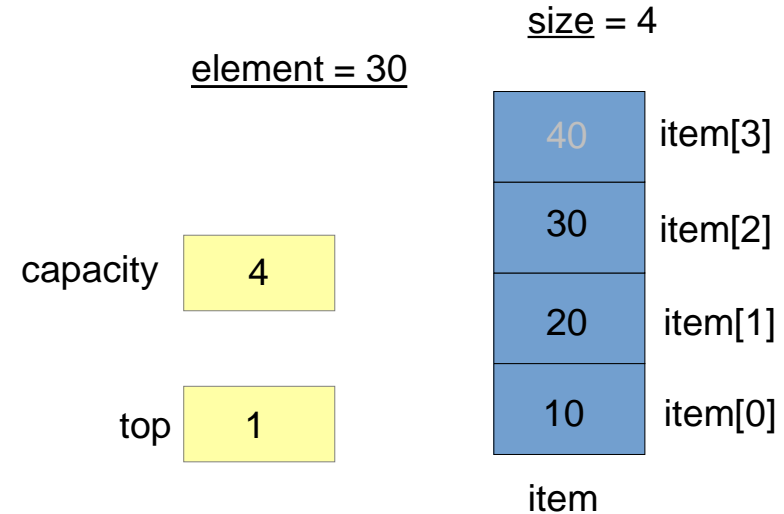
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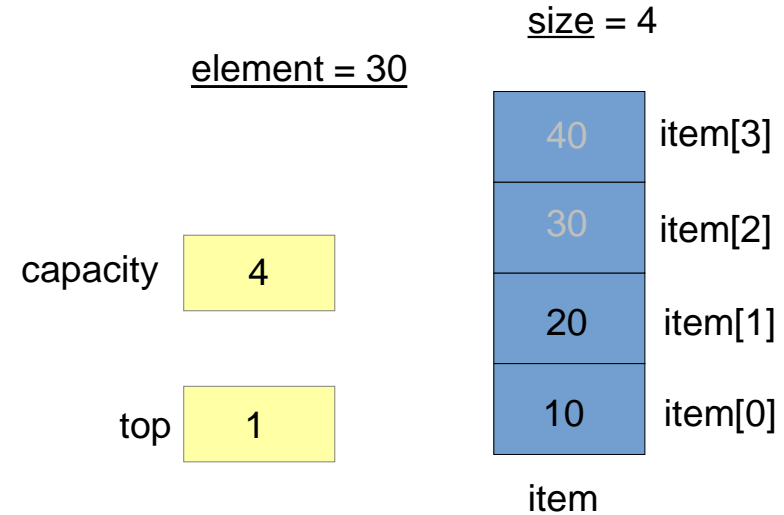
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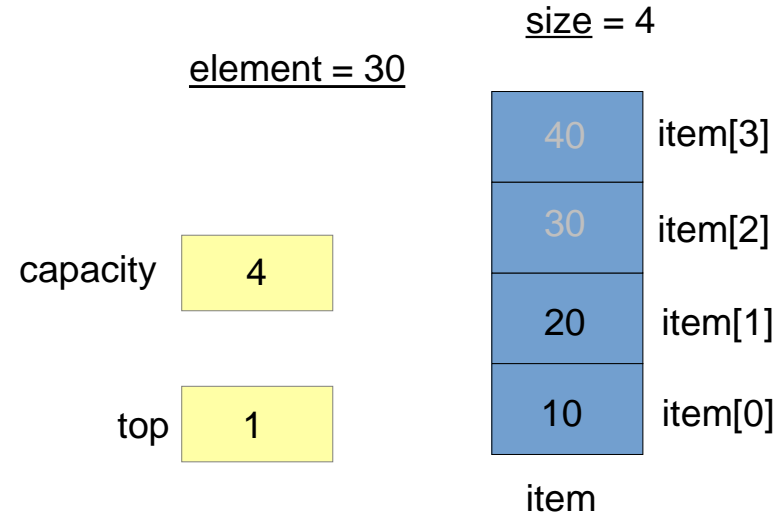
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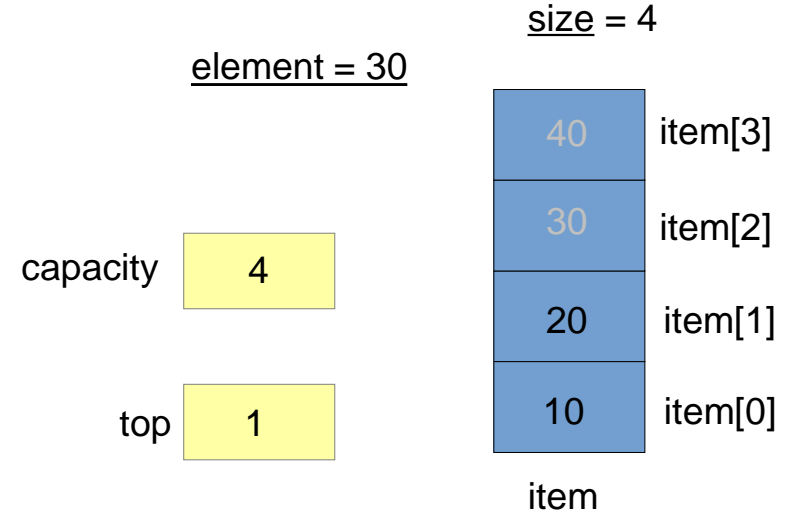
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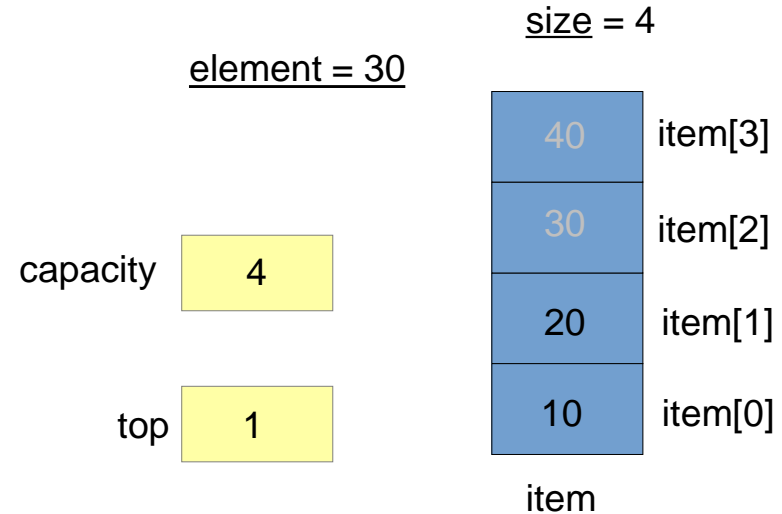
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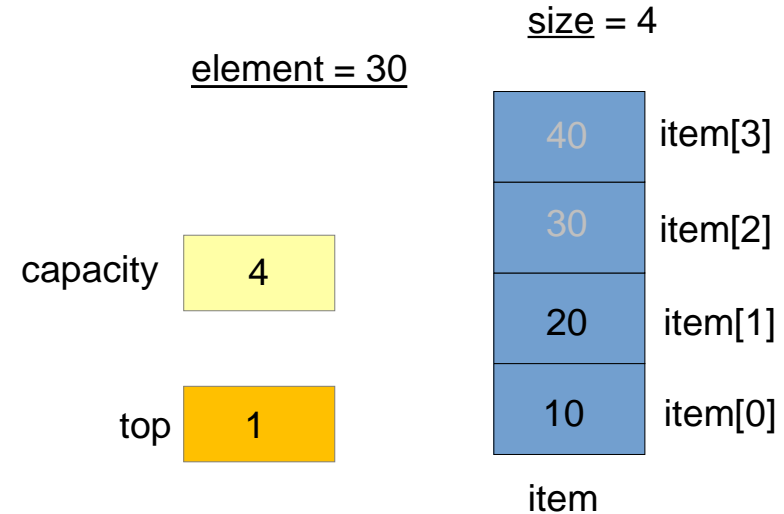
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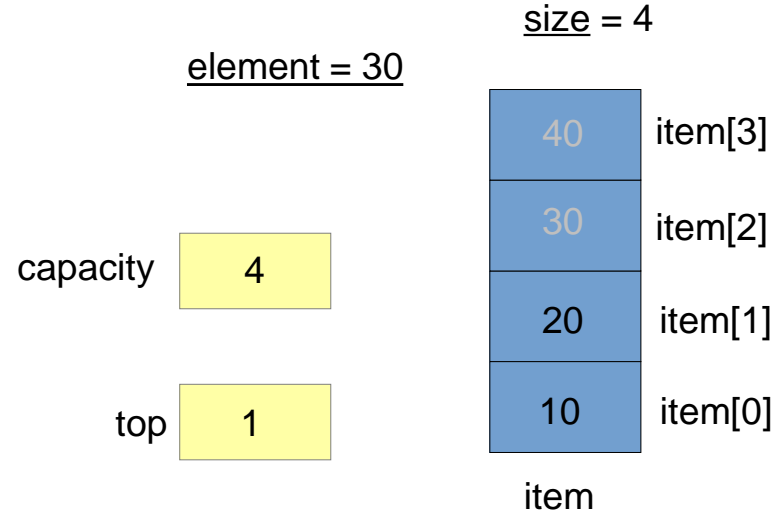
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Stack – peek(stack,element)