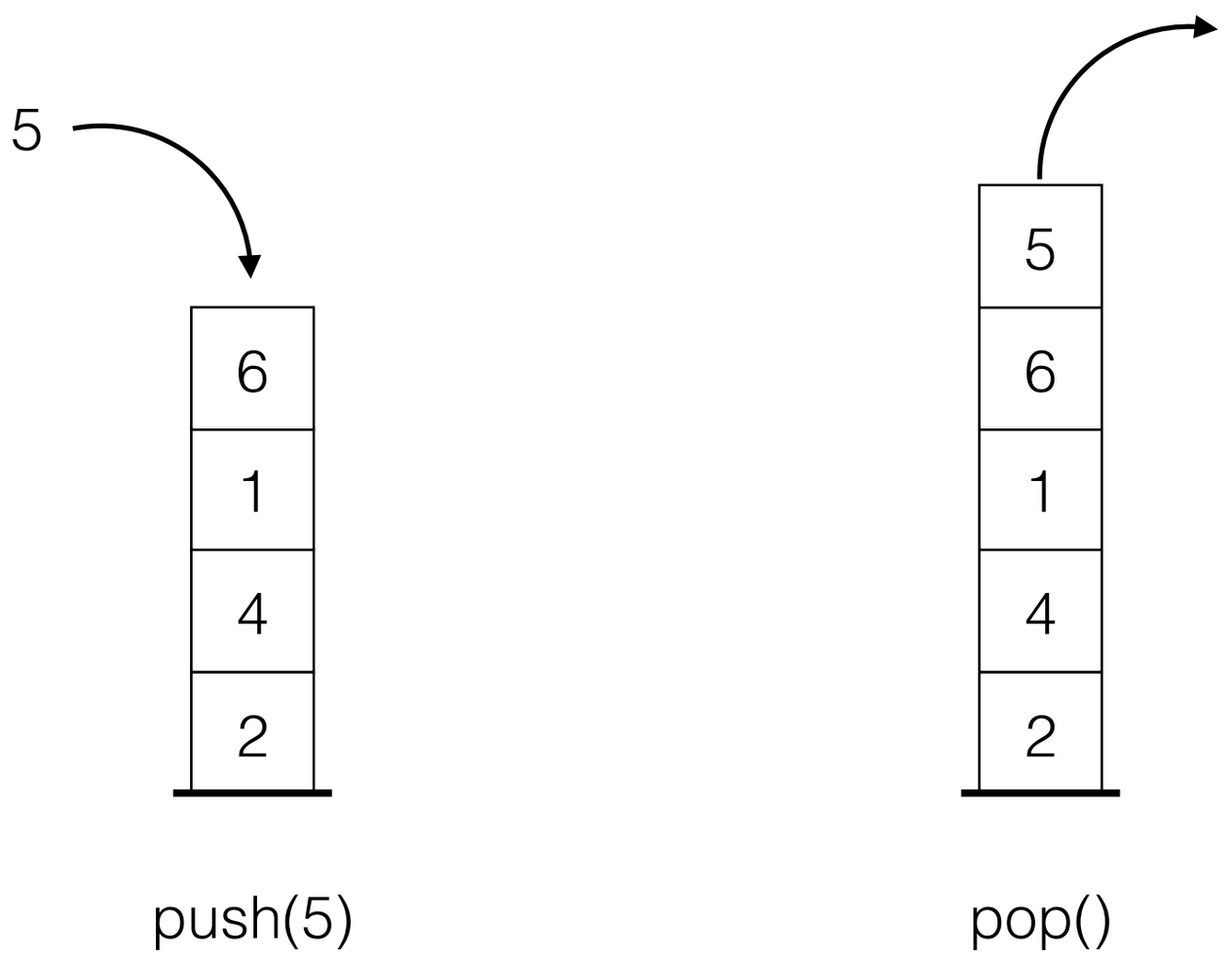
Stack



push(5)

pop()

Last In First Out (LIFO)

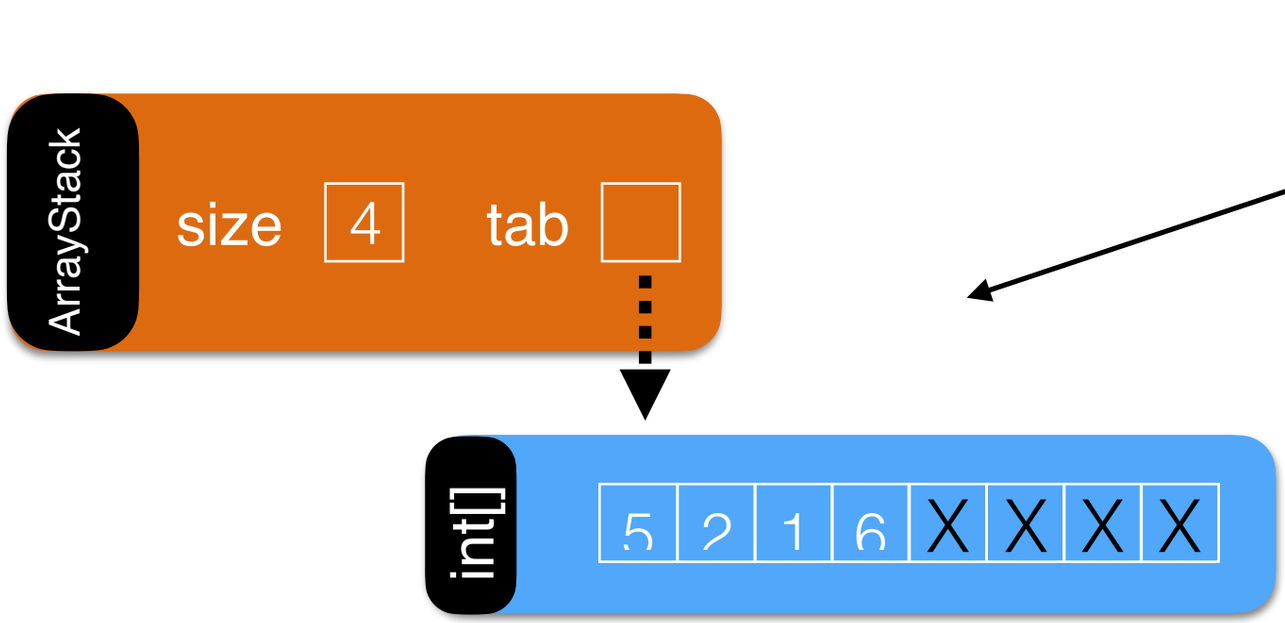
Interface

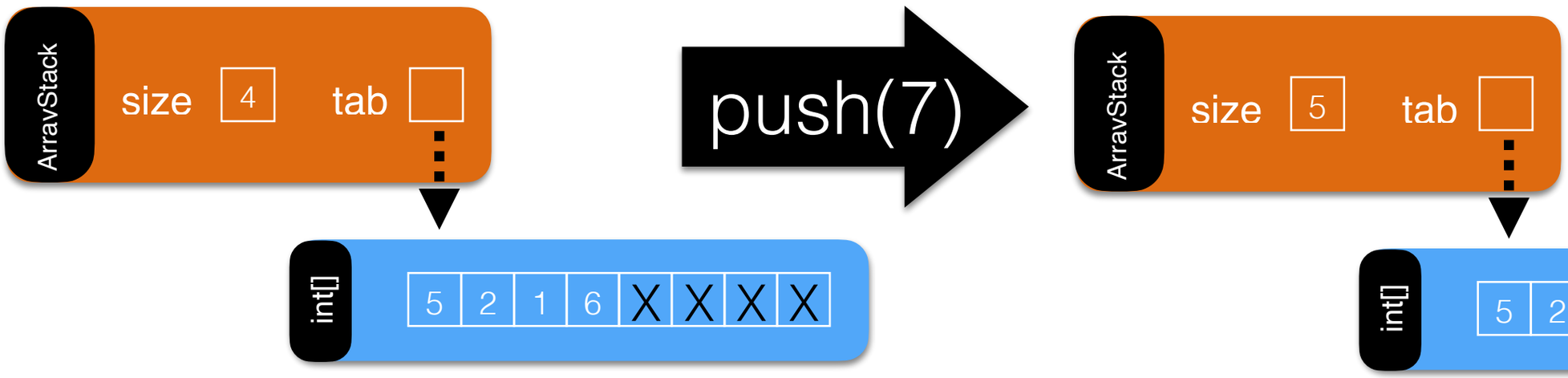
- boolean isEmpty()
- void push(int value)
- int top()
- int pop()
- int size()

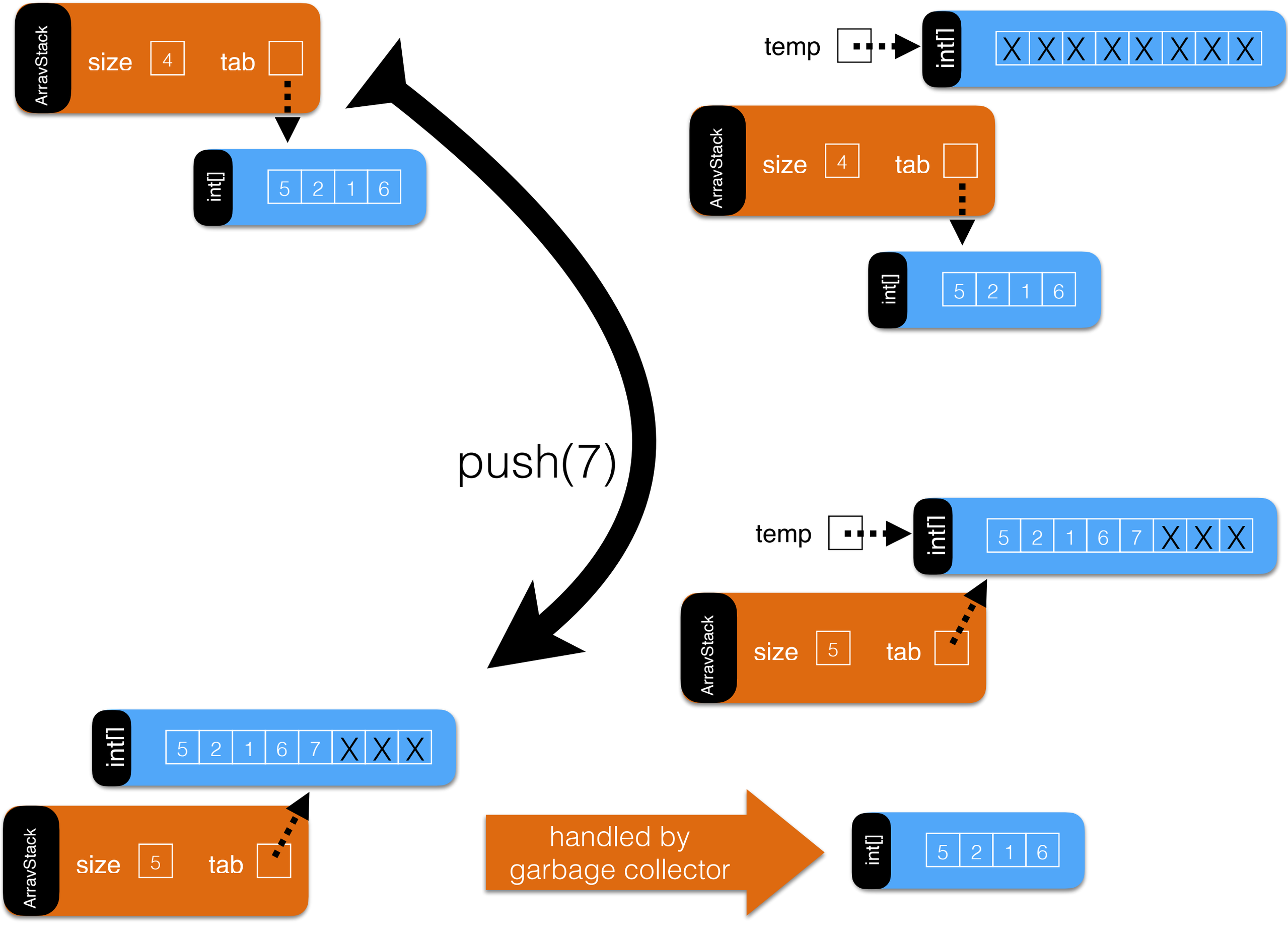
ArrayStack

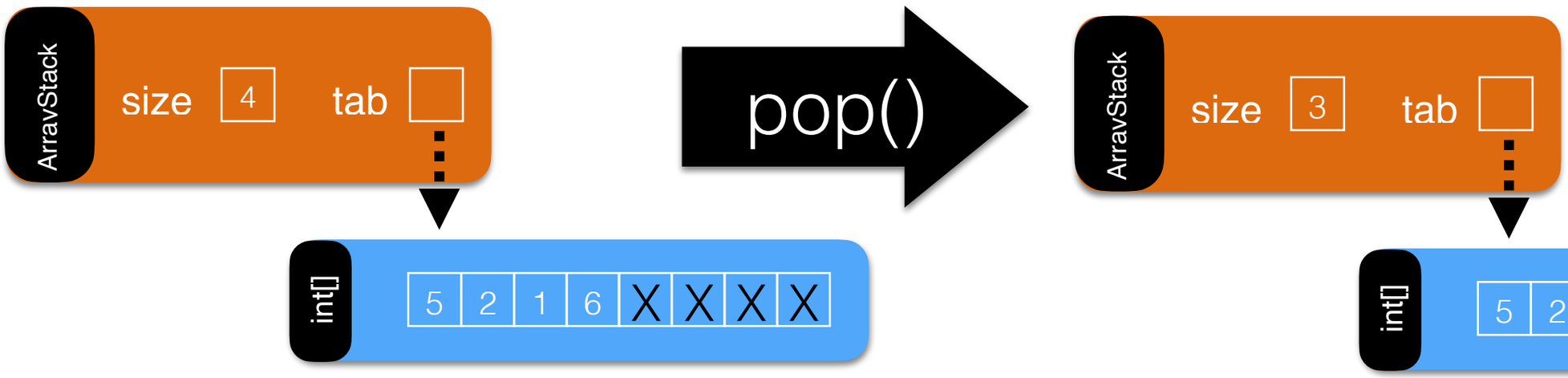
Data representation

```
s = new ArrayStack()
s.push(5)
s.push(2)
s.push(1)
s.push(6)
```



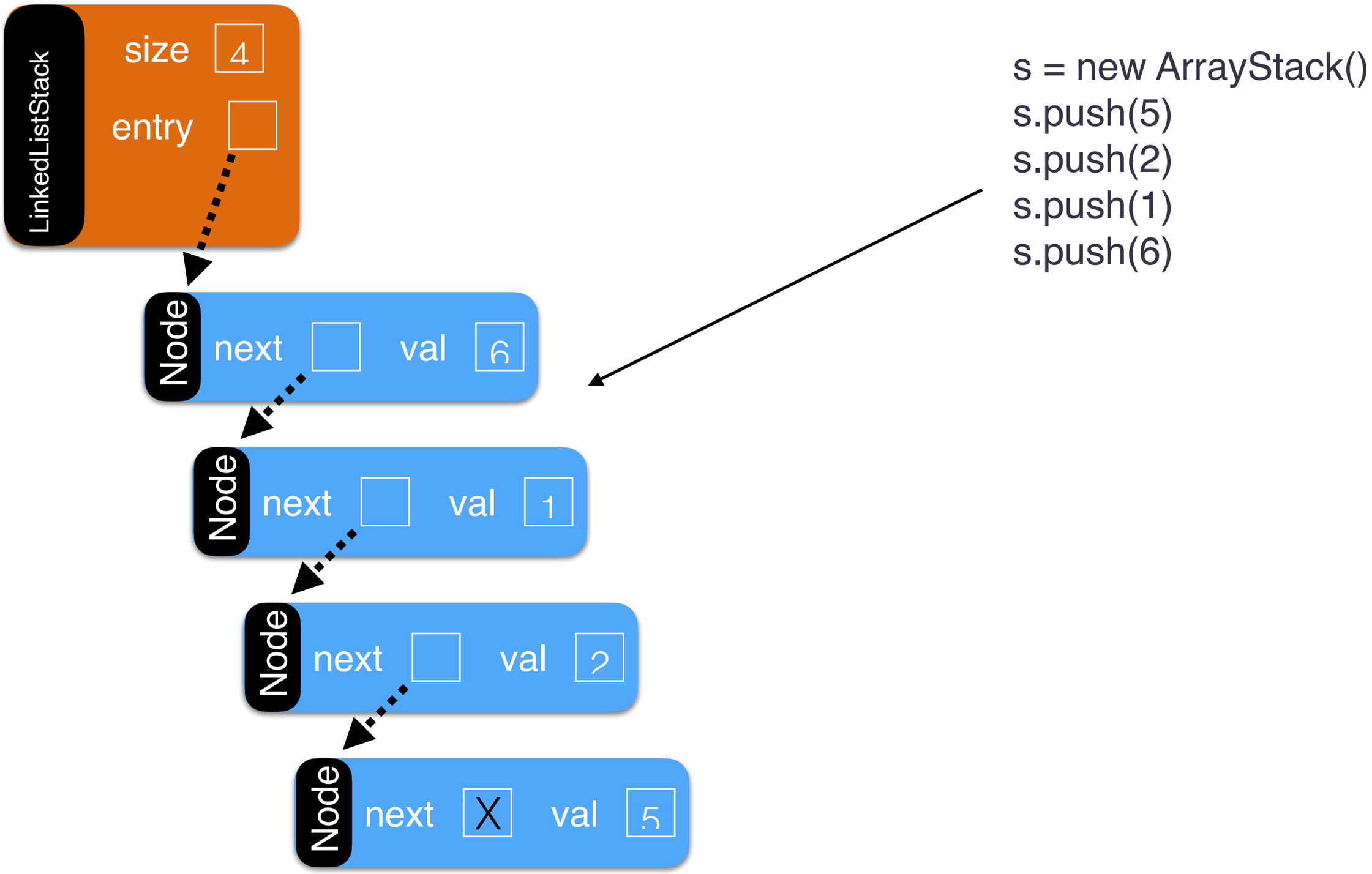

ArravStack
size
4
tab
push(7)
ArravStack
size
5
tab
int[]
5
2
1
6
X
X
X
X
int[]
5
2
1
6
7
X
X
X


ArravStack
size
4
tab
int[]
5
2
1
6
push(7)
temp
int[]
X
X
X
X
X
X
X
X
ArravStack
size
4
tab
int[]
5
2
1
6
temp
int[]
5
2
1
6
7
X
X
X
ArravStack
size
5
tab
int[]
5
2
1
6
7
X
X
X
ArravStack
size
5
tab
handled by
garbage collector
int[]
5
2
1
6

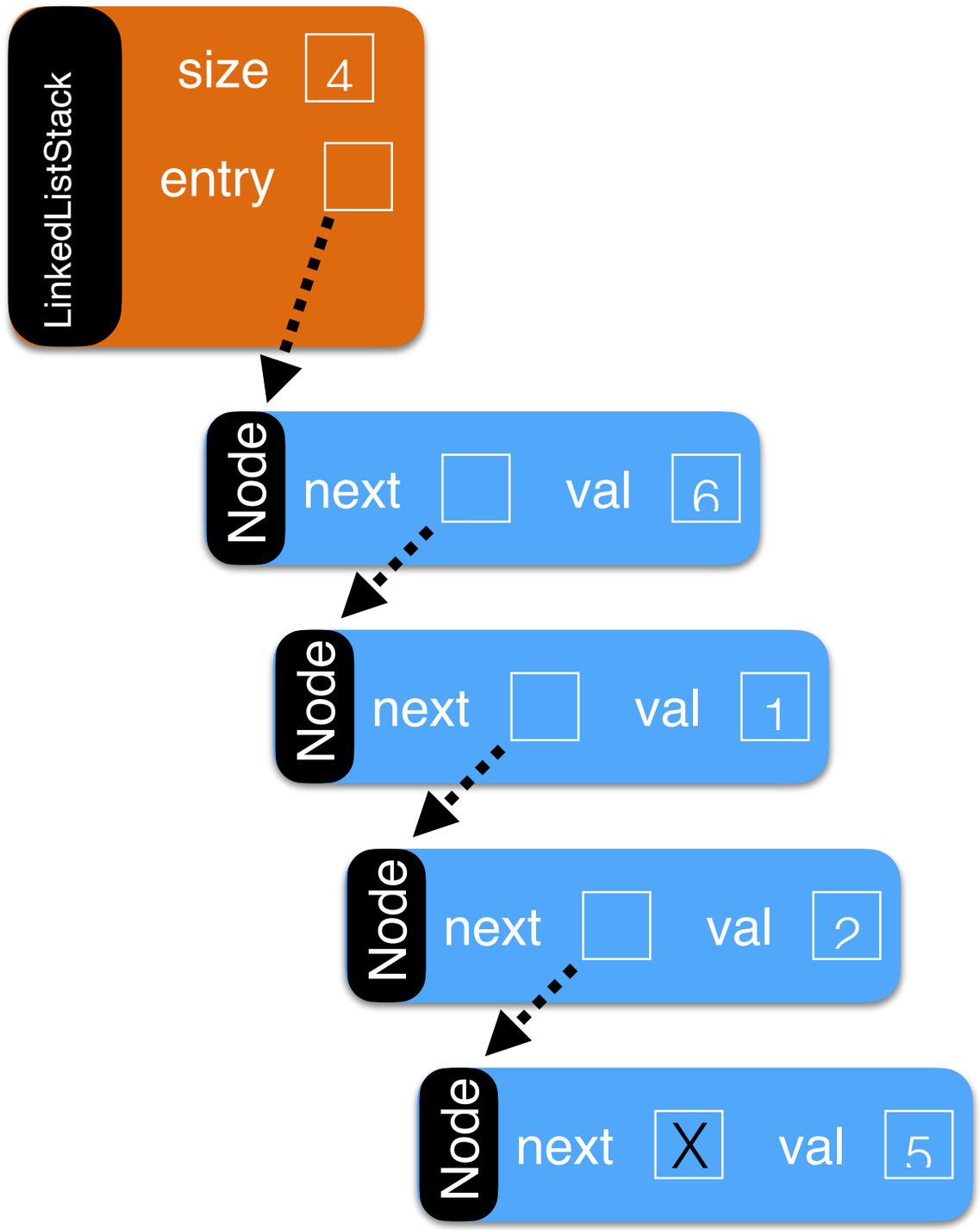

ArravStack
size
4
tab
pop()
ArravStack
size
3
tab
int[]
5
2
1
6
X
X
X
X
int[]
5
2
1
X
X
X
X
X

LinkedListStack

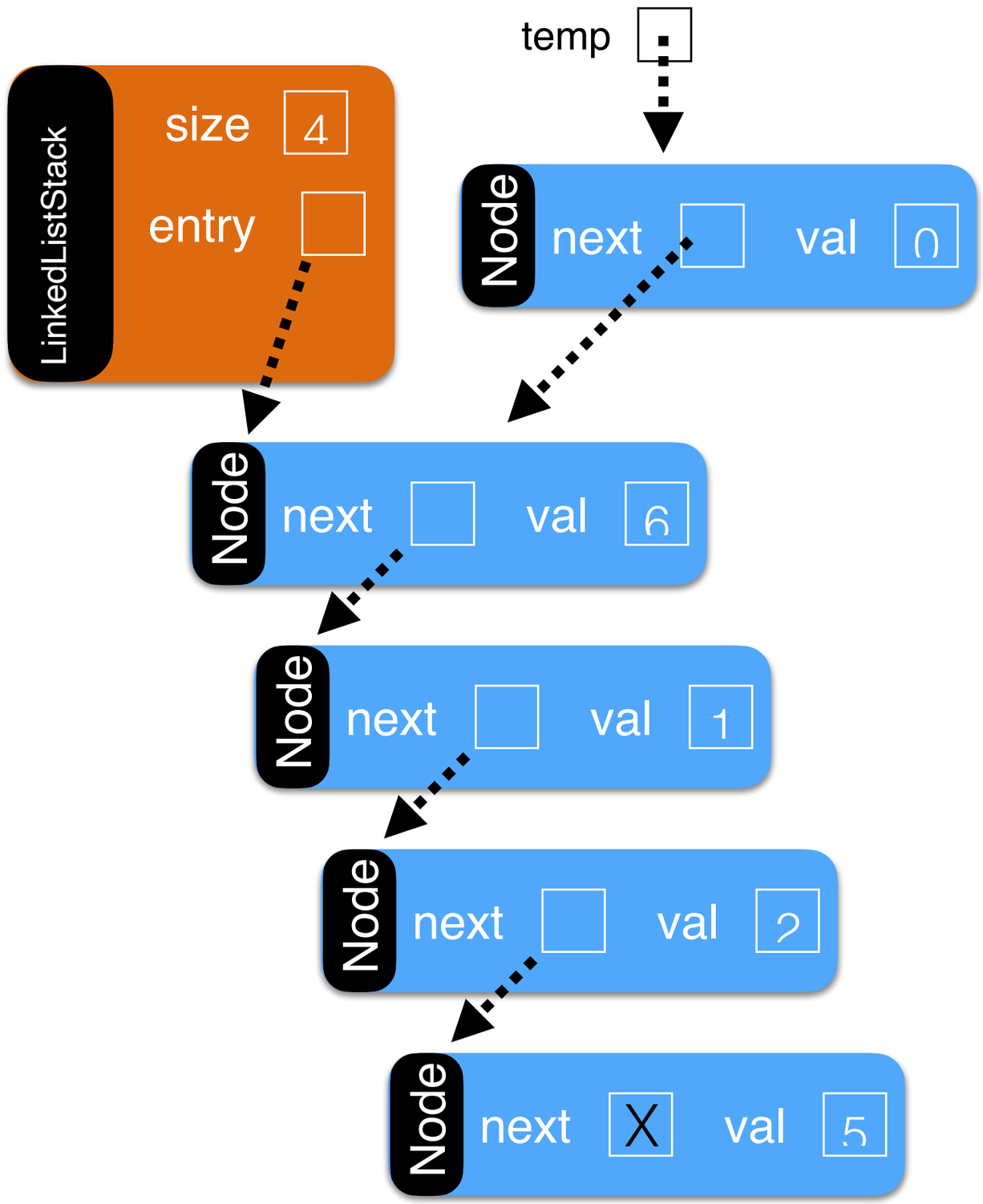
Data representation



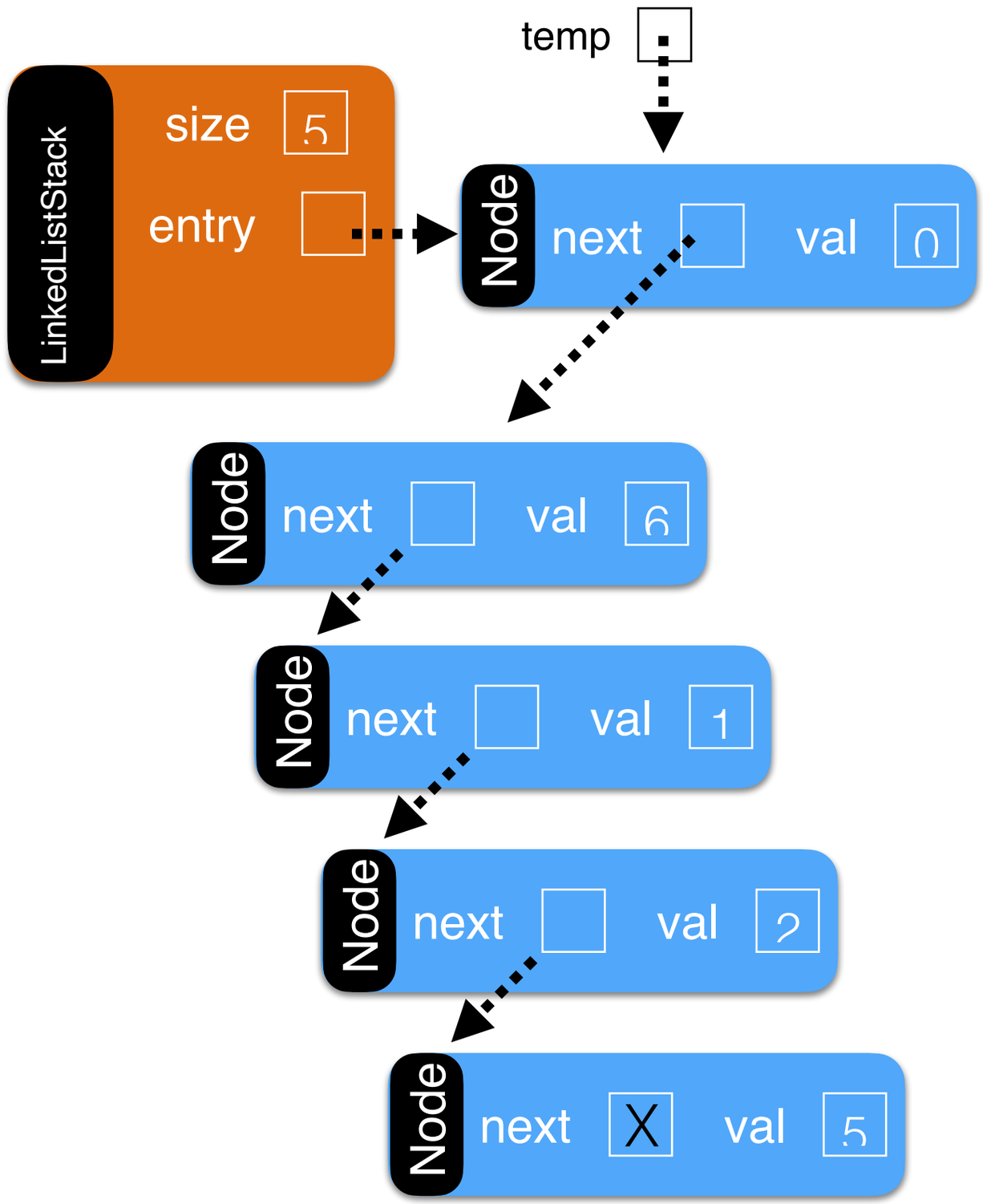
push(0)


LinkedListStack
size
4
entry
Node
next
val
6
Node
next
val
1
Node
next
val
2
Node
next
X
val
5

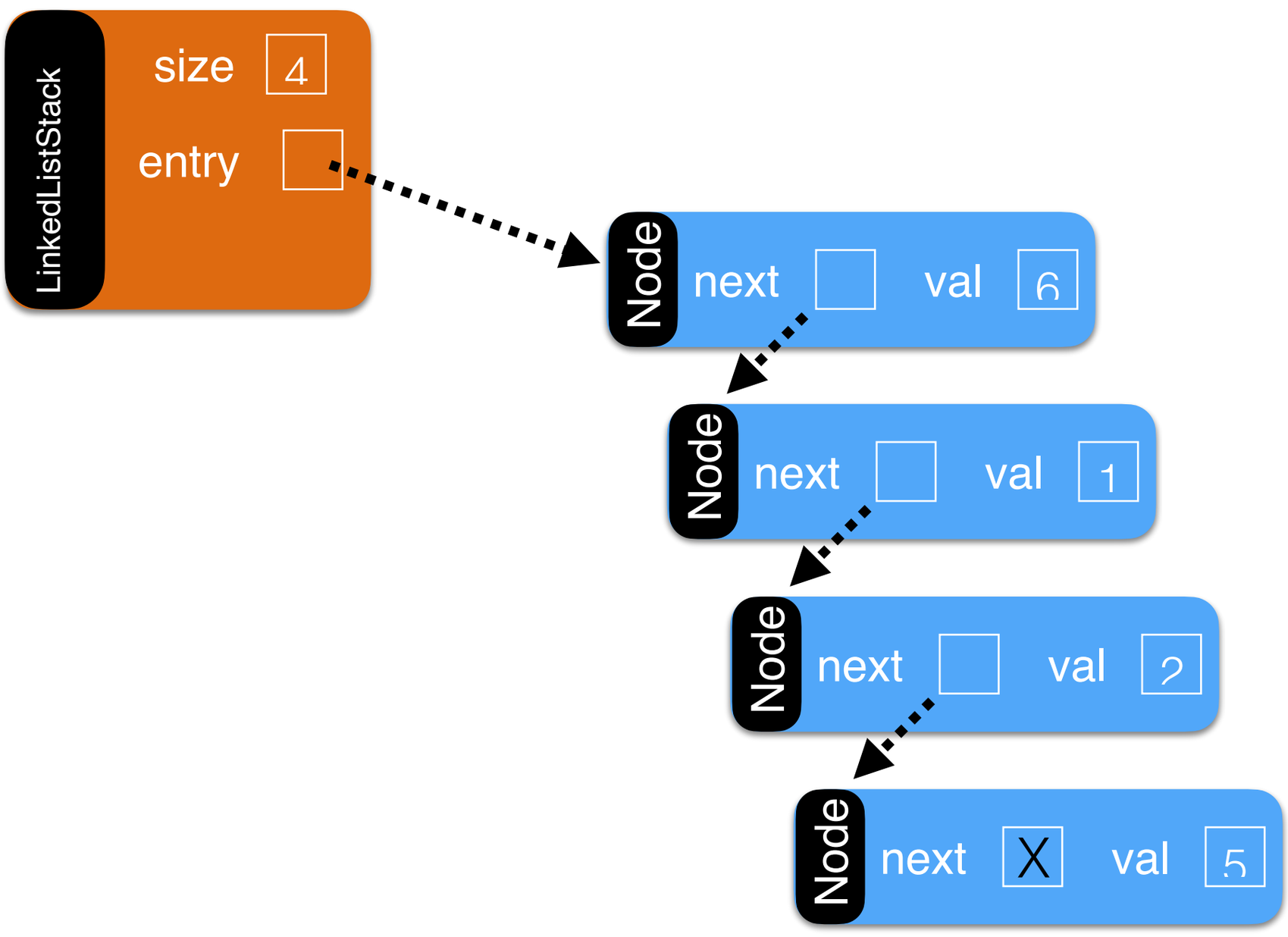
push(0)
step 1/2



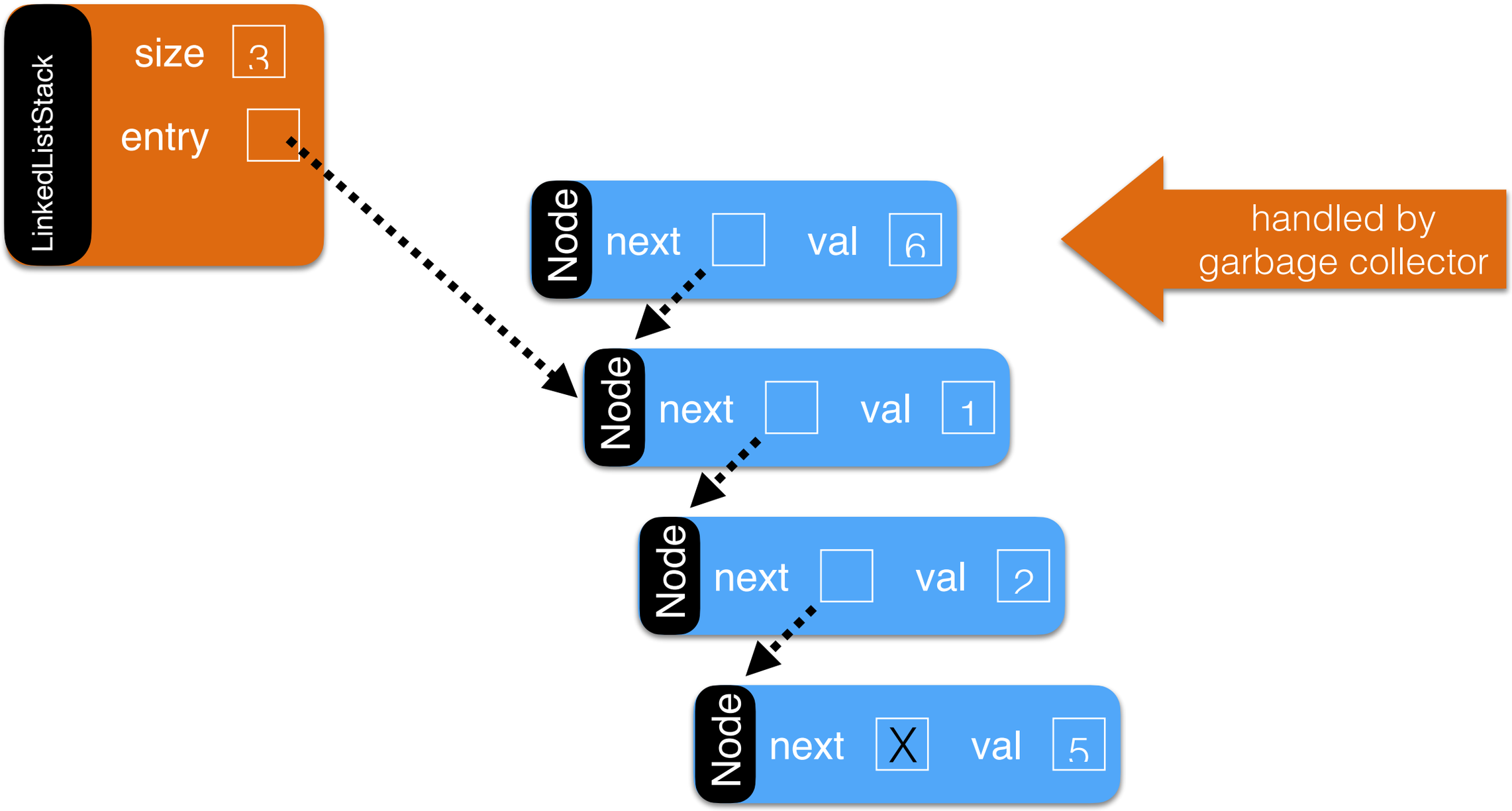
push(0)
step 2/2



pop()


LinkedListStack
size
4
entry
Node
next
val
6
Node
next
val
1
Node
next
val
2
Node
next
X
val
5

pop()


LinkedListStack
size
3
entry
Node
next
val
6
handled by
garbage collector
Node
next
val
1
Node
next
val
2
Node
next
X
val
5