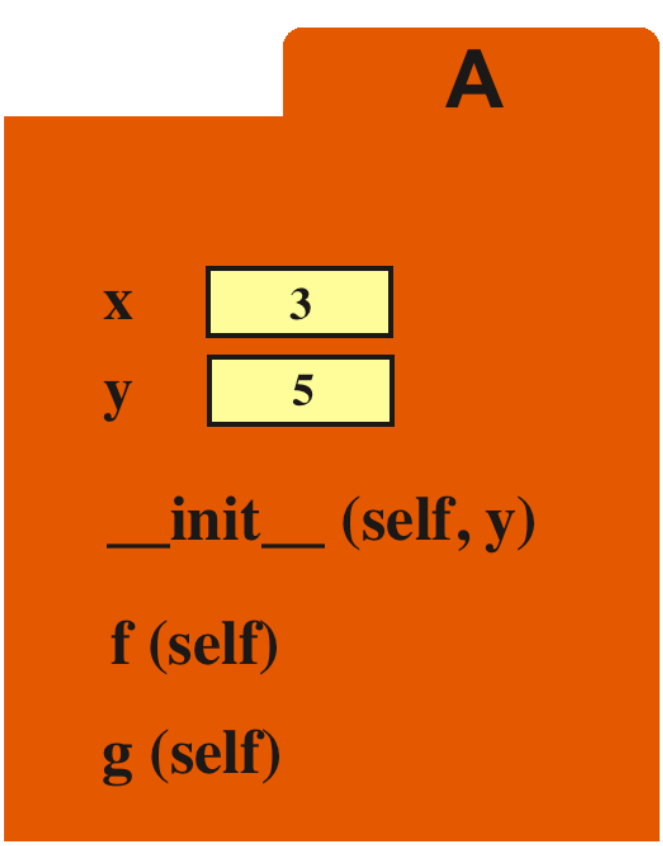
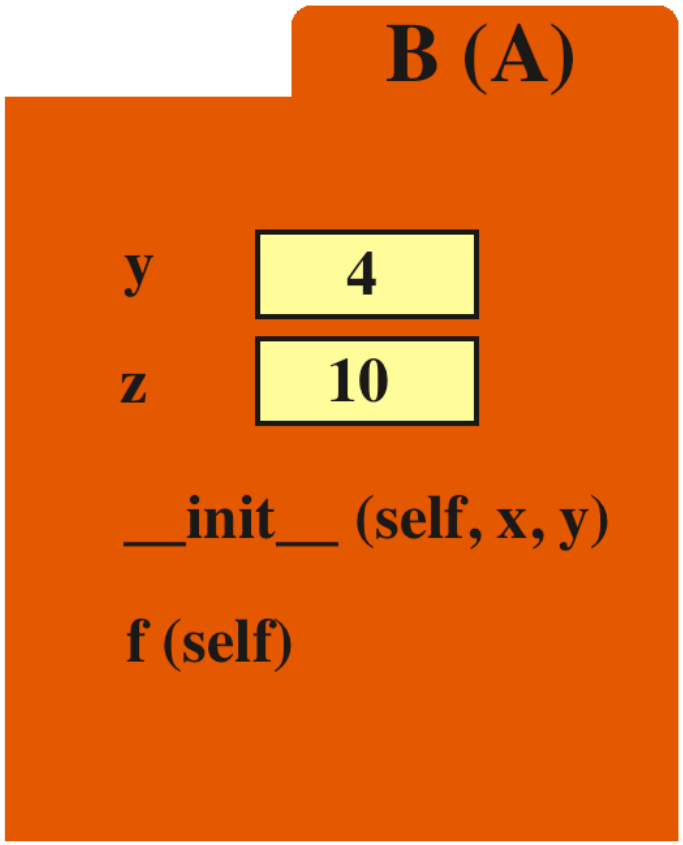
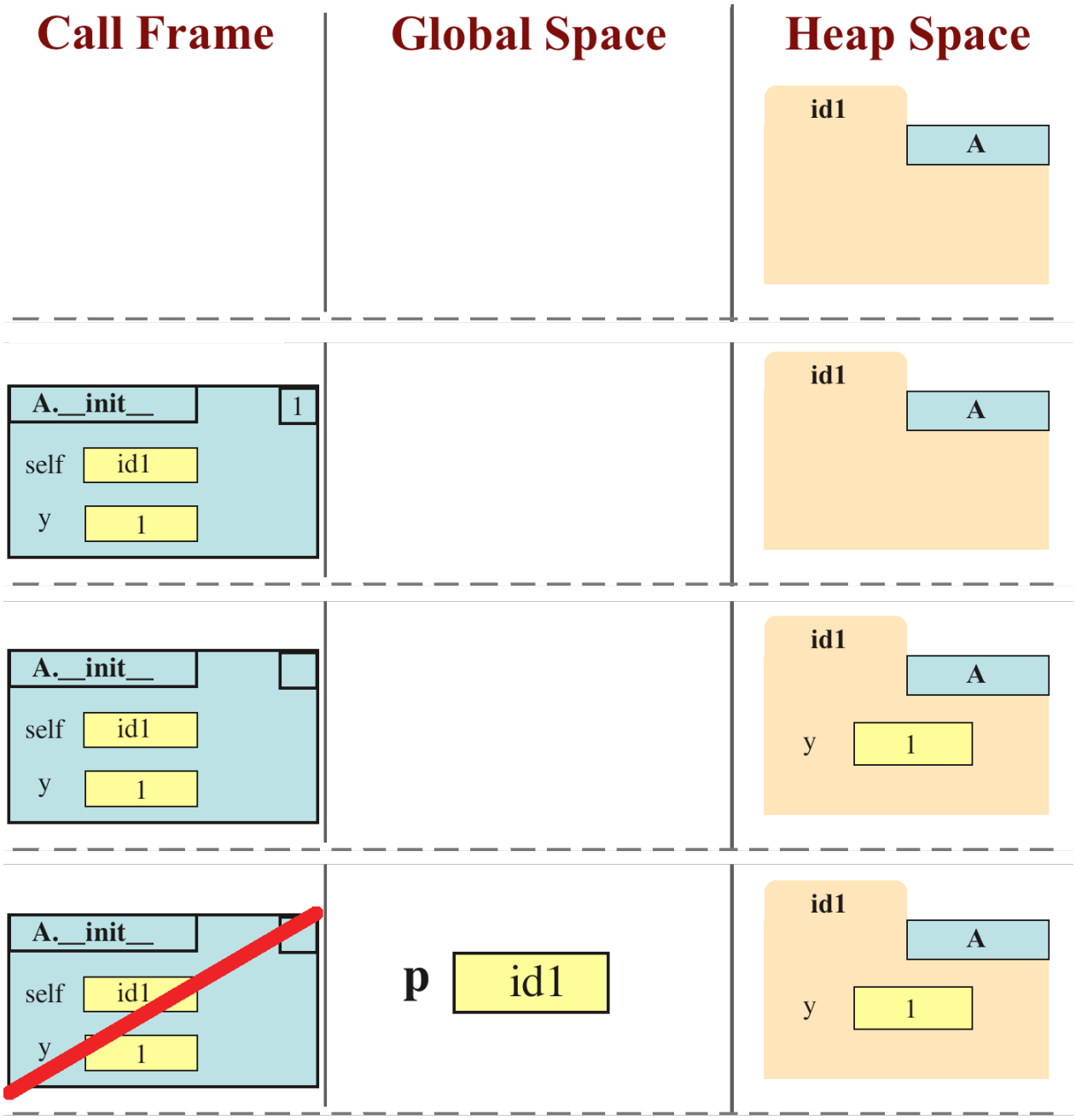
Part A

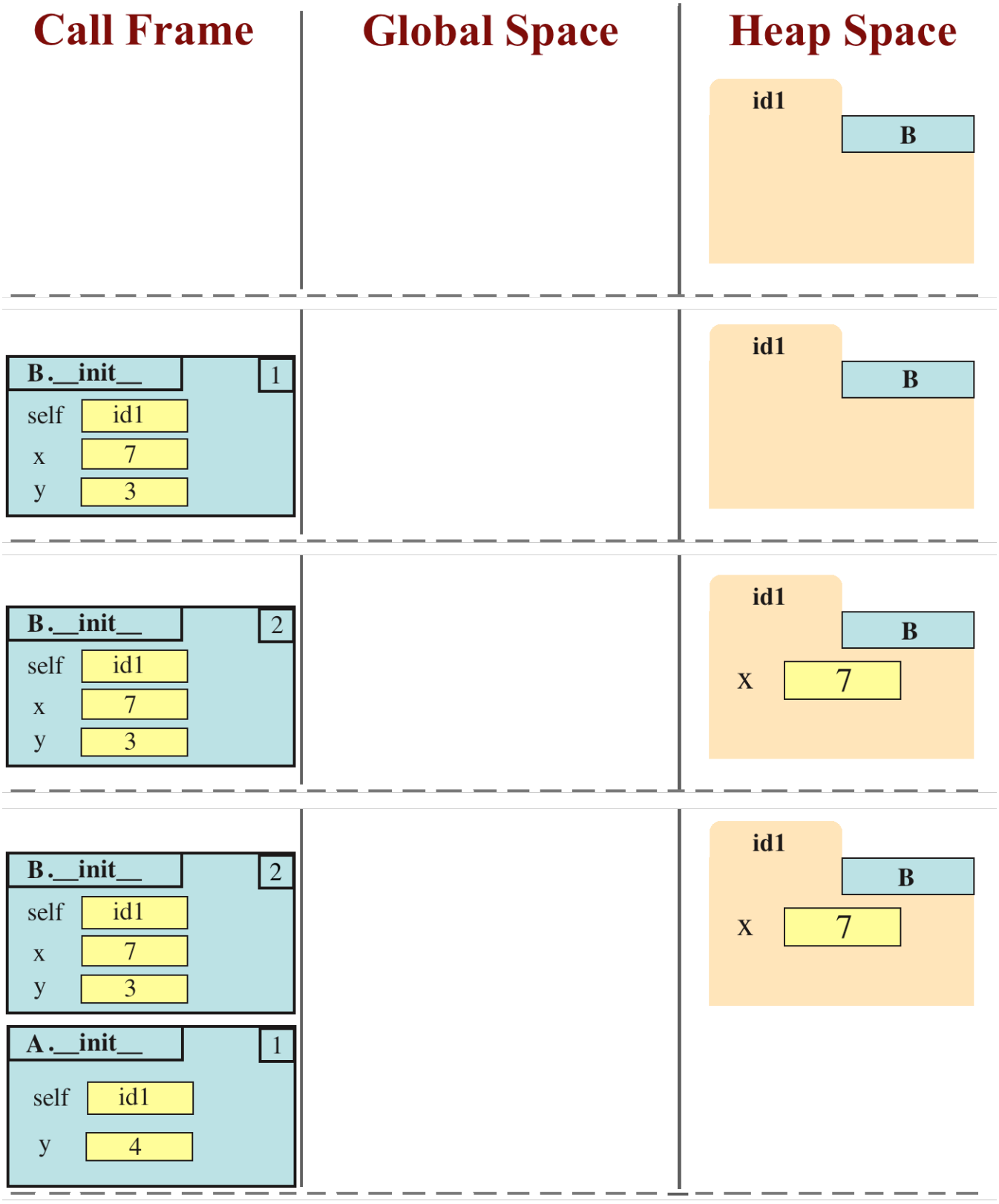


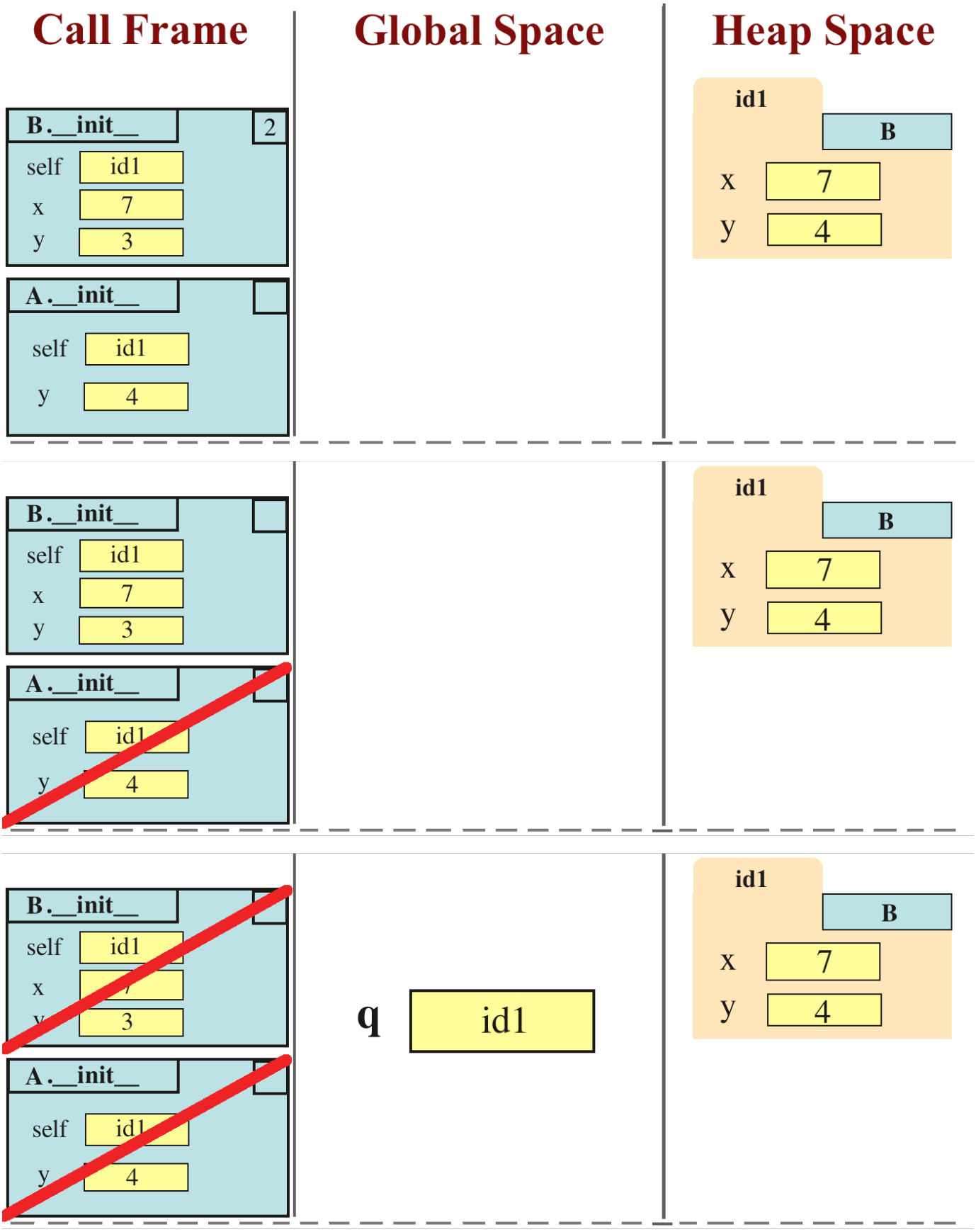


Part B

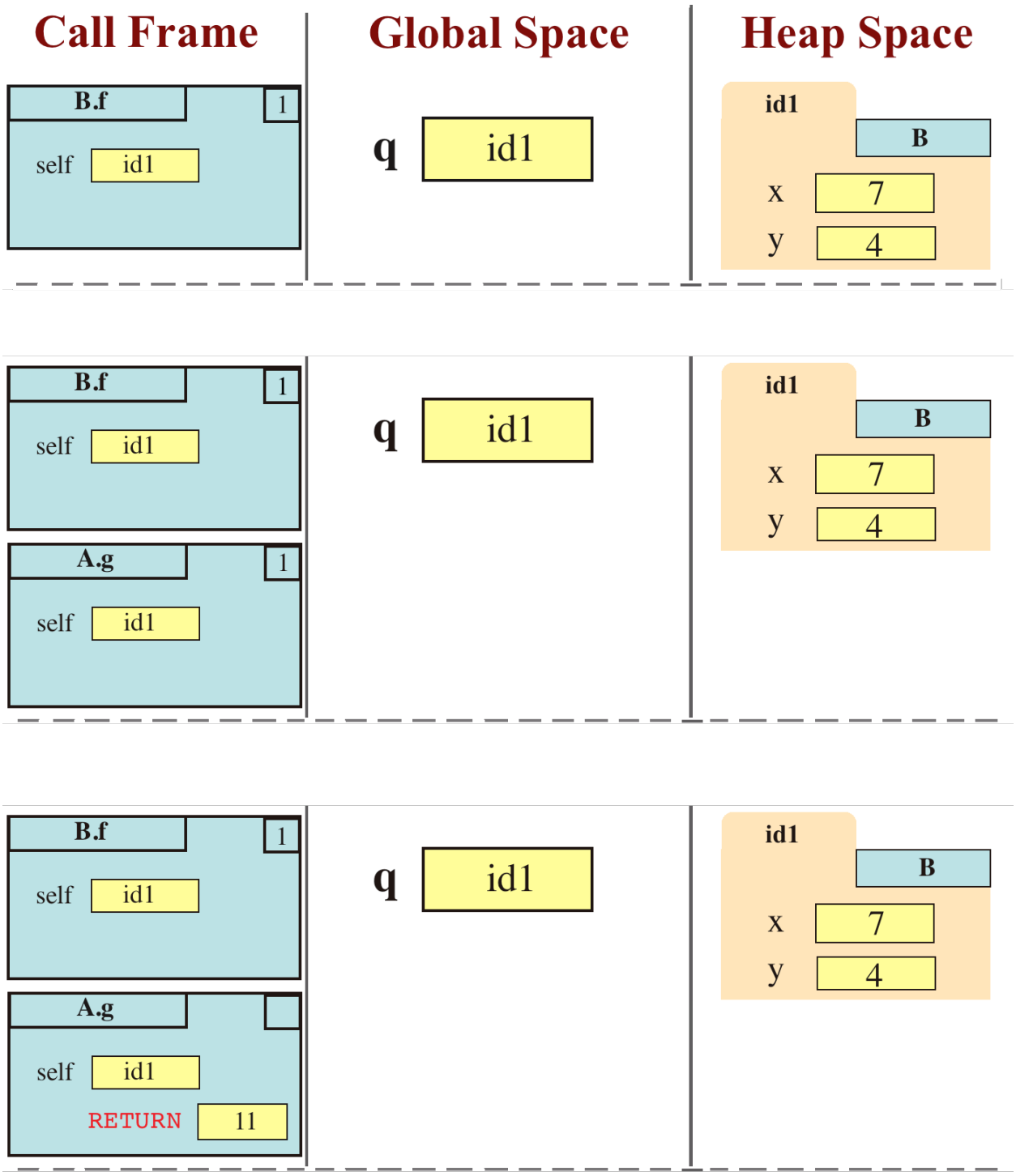

Call Frame
Global Space
Heap Space
id1
A
A.__init__
1
self
id1
y
1
id1
A
A.__init__
self
id1
y
1
id1
A
y
1
A.__init__
self
id1
y
1
p
id1
id1
A
y
1

Part C


Call Frame
Global Space
Heap Space
id1
B
B.__init__
1
self
id1
x
7
y
3
id1
B
B.__init__
2
self
id1
x
7
y
3
id1
B
x
7
B.__init__
2
self
id1
x
7
y
3
A.__init__
1
self
id1
y
4
id1
B
x
7


Call Frame
Global Space
Heap Space
B.__init__
2
self
id1
x
7
y
3
A.__init__
self
id1
y
4
id1
B
x
7
y
4
B.__init__
self
id1
x
7
y
3
A.__init__
self
id1
y
4
id1
B
x
7
y
4
B.__init__
self
id1
x
7
y
3
A.__init__
self
id1
y
4
q
id1
id1
B
x
7
y
4

Part D


Call Frame
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Heap Space
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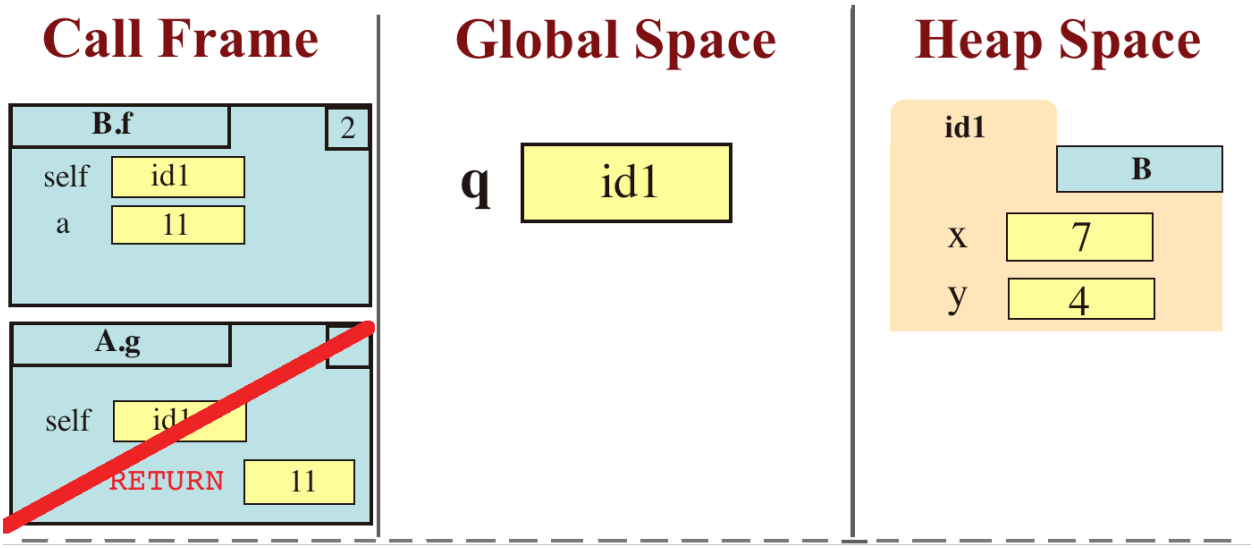
self
id1
q
id1
id1
B
x
7
y
4
B.f
1
self
id1
A.g
1
self
id1
q
id1
id1
B
x
7
y
4
B.f
1
self
id1
A.g
self
id1
RETURN
11
q
id1
id1
B
x
7
y
4


Call Frame
Global Space
Heap Space
B.f
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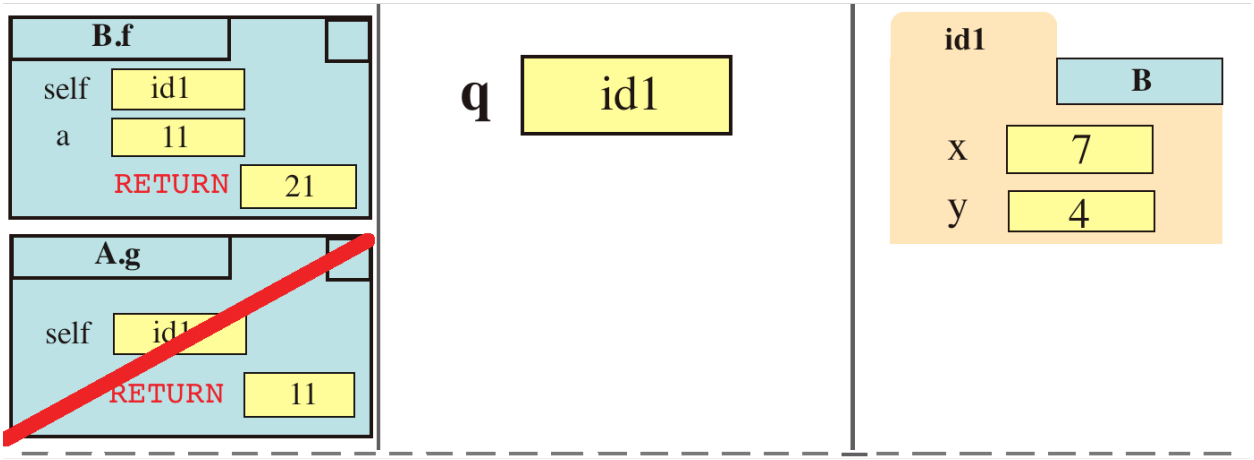
self
id1
a
11
A.g
self
id1
RETURN
11
q
id1
id1
B
x
7
y
4


B.f
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id1
a
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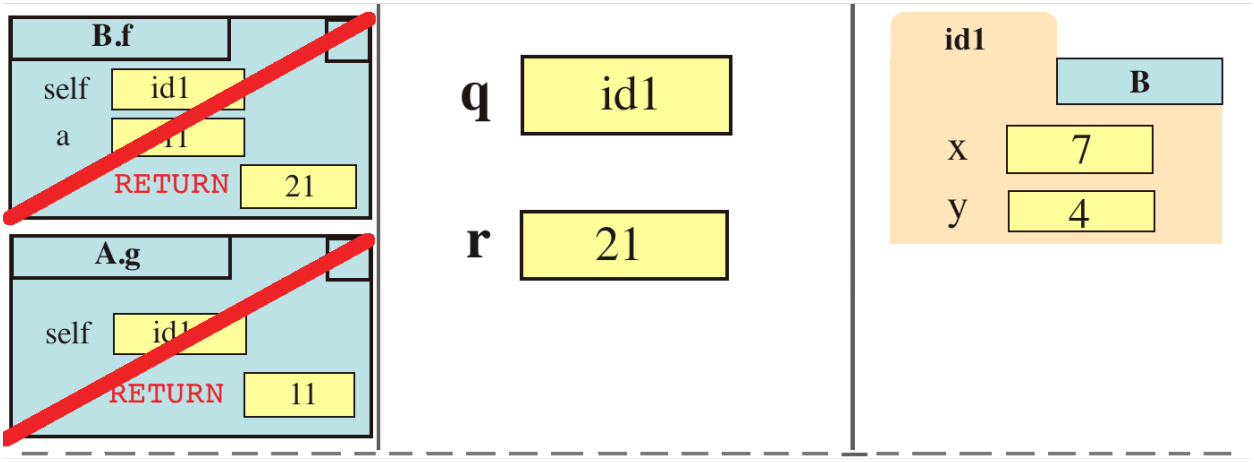
RETURN
21
A.g
self
id1
RETURN
11
q
id1
id1
B
x
7
y
4


B.f
self
id1
a
RETURN
21
A.g
self
id1
RETURN
11
q
id1
r
21
id1
B
x
7
y
4