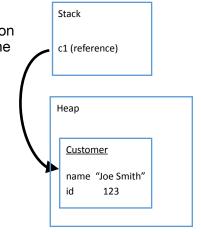
```
1) Customer c1 = new Customer("Joe Smith", 123);
2) BankAccount b = new BankAccount(50.0, c1);
3) Customer c2 = b.getAccountHolder();
4) c2.setName("Ana Bell");
5) System.out.println(c1.getName());
```

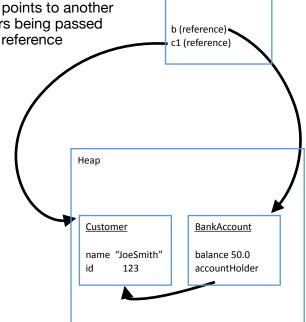
1) an instance of class Customer is created at some arbitrary memory location on heap, with 'c1' being its variable of reference type created on the stack that points to it. The first two parameters being passed are the data instance variables of the object, string 'Joe Smith' and int 123



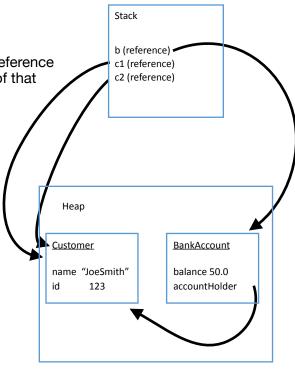
Stack

2) an instance of class BankAccount is created with 'b' being its variable, of reference type, created on the stack. The reference b points to another memory location on the heap. The first two parameters being passed are the data instance variables of the object, with the reference 'c1' being passed as the second parameter and the accountHolder in BankAccount then points to the

Customer instance



3) an action getAccountHolder is performed on the object reference b is pointing to. This action returns the instance variable of that object, of type Customer. A variable c2 is created of type reference on the stack and it points to that returned instance variable, which itself points to another memory location on the heap so c2 points to that same memory location as c1.



4) An action setName is performed on the object c2 is pointing to. The action takes the string 'Ana Bell' and manipulates the instance variable data of the object

to. The
b (reference)
c1 (reference)
c2 (reference)

Heap

Customer
name "JoeSmith"
balance 50.0
accountHolder
id 123

5) An action getName is performed on the object c1 is pointing to. The action returns the value of the instance variable data of the object, now being 'Ana Bell'.

Customer

name "Ana Bell"

id 123

c1 (reference)

c2 (reference)

BankAccount

balance 50.0

accountHolder

Stack

b (reference)