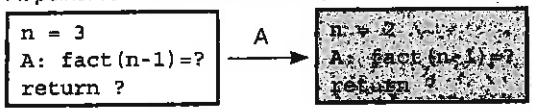
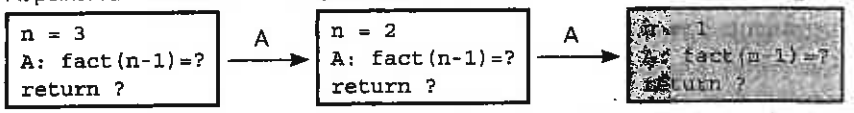
The initial call is made, and method `fact` begins execution:

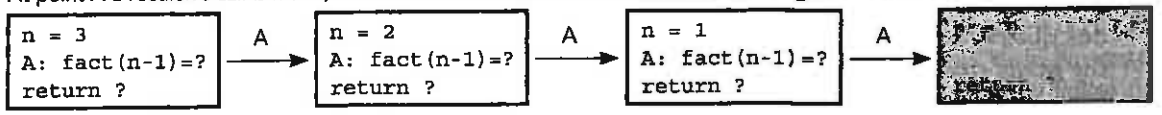
At point A a recursive call is made, and the new invocation of the method `fact` begins execution:



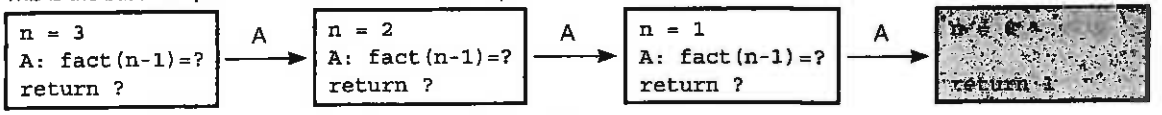
At point A a recursive call is made, and the new invocation of the method `fact` begins execution:



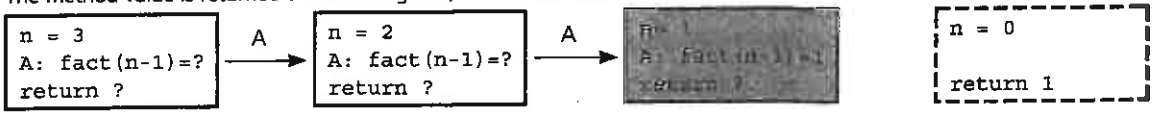
At point A a recursive call is made, and the new invocation of the method `fact` begins execution:



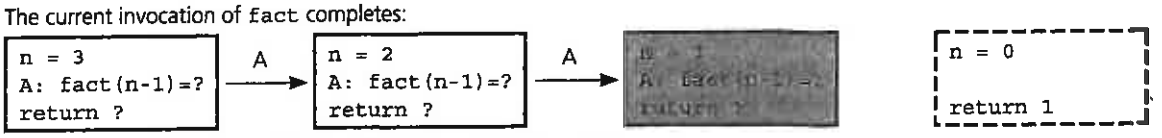
This is the base case, so this invocation of `fact` completes:



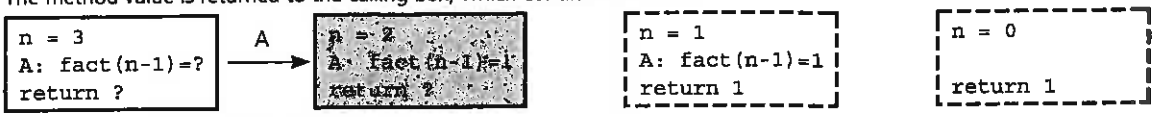
The method value is returned to the calling box, which continues execution:



The current invocation of `fact` completes:

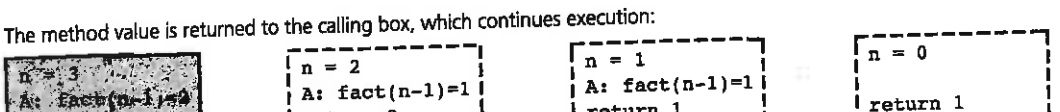


The method value is returned to the calling box, which continues execution:



The current invocation of `fact` completes:

The method value is returned to the calling box, which continues execution:



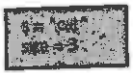
The current invocation of `fact` completes:

The value 6 is returned to the initial call.

FIGURE 2-5

(continued from previous)

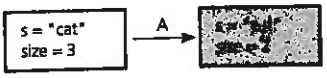
The initial call is made, and the function begins execution:



Output line: **t**

Point A (`writeBackward(s, size-1)`) is reached, and the recursive call is made.

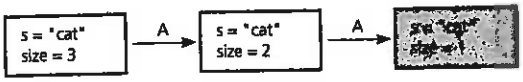
The new invocation begins execution:



Output line: **ta**

Point A is reached, and the recursive call is made.

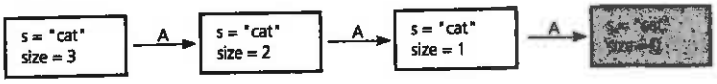
The new invocation begins execution:



Output line: **tac**

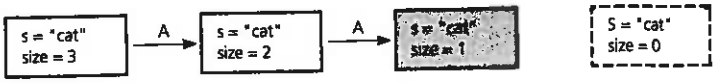
Point A is reached, and the recursive call is made.

The new invocation begins execution:



This is the base case, so this invocation completes.

Control returns to the calling box, which continues execution:



This invocation completes. Control returns to the calling box, which continues execution:

This invocation completes. Control returns to the calling box, which continues execution:

This invocation completes. Control returns to the statement following the initial call.

FIGURE 2-7

Box trace of `writeBackward("cat", 3)`

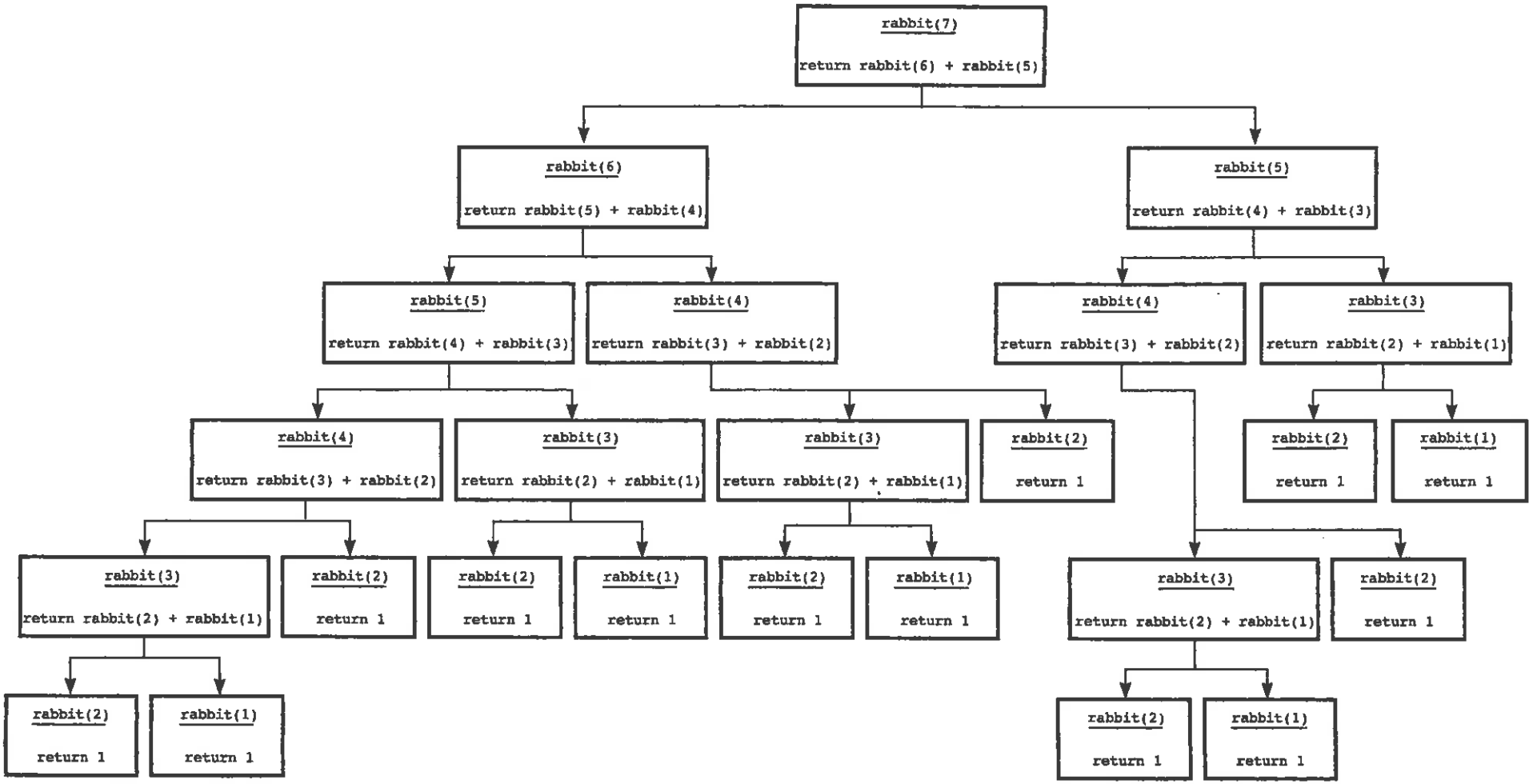


FIGURE 2-11

The recursive calls that ***rabbit(7)*** generates