Chapter 1: Basic Concepts

Exercise Solutions

1.1 Difficulty [10]

Answer

$$t \leftarrow a \;,\, a \leftarrow b,\, b \leftarrow c,\, c \leftarrow d,\, d \leftarrow t$$

Explanation

Since we're "overwriting" each value by shifting every variable to the left, we have to keep an "extra copy" of ${\bf a}$ in ${\bf t}$ before it gets overwritten, that way we can overwrite ${\bf d}$ with ${\bf t}$ (our "copy" or equivalent to ${\bf a}$) at the end- thus preserving ${\bf a}$. Order significantly matters here as we can't go the other direction without it being too many steps.

Comments

This is the equivalent of a nice beginning programming exercise I use at Girls Who Code! Gets the brain stirring, but definitely a simpler exercise that gets the point across.