Show All Solutions

Rosen, Discrete Mathematics and Its Applications, 7th edition
Extra Examples
Section 5.5—Program Correctness

Extra Examples — *Page references correspond to locations of Extra Examples icons in the textbook.*

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p.373, icon at Example 1

#1. Show that the program segment S

$a := 5$
$c := a + 2b$

is correct with respect to the initial assertion p: $b = 3$ and the final assertion q: $c = 11$.

See Solution

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p.375, icon at Example 4

#1. Use a loop invariant to prove that this program segment for computing nx (x a real number), where n is a positive integer, is correct:

$multiple := 0$
$i := 1$
while $i \leq n$
begin
  $multiple := multiple + x$
  $i := i + 1$
end

See Solution
