

CSC 455 - Assignment 3

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1 Weakest Preconditions

1. Find the weakest precondition of the expression $a = a + 2 * _1, \{a > 1\}$

$$a > 1$$

$$a + 2 * b - 1 > 1$$

$$a + 2 * b > 2$$

2. Find the weakest precondition of the expressions

$$a = 2 * b + 1$$

$$b = a - 3$$

$$\{b < 0\}$$

$$b < 0$$

$$a - 3 < 0$$

$$a < 3$$

$$2 * b + 1 < 3$$

$$2 * b < 2$$

$$b < 1$$