

1. Prove $\{x > 1\} \ x := x+1; \ x := -x \ \{x < 0\}$.

2. Prove that the program $x := x+y; \ y := x-y; \ x := x-y$ swaps the values of x and y . The conclusion should be:

$\{x = A \wedge y = B\} \ x := x+y; \ y := x-y; \ x := x-y \ \{y = A \wedge x = B\}$