

- $(PC = entry) \rightarrow (PC = L \implies X < 17)$: for all states reachable from the start of the program, if at label L then $X < 17$;
- $(PC = entry) \rightarrow (PC = L \wedge 3 \leq I \leq 7 \implies X < 17)$: for all states reachable from the start of the program, if at label L , with the value of I between 3 and 7, then $X < 17$;
- $(PC = entry \wedge 1 \leq X \leq 10) \rightarrow (PC = exit \implies Y \leq 100)$: if the program is started with $1 \leq X \leq 10$ then, at exit, $Y \leq 100$;
- $(PC = L \wedge X = i) \rightarrow (PC = L' \implies X = 2 \cdot i)$: for any value of i , if the program passes L with $X = i$ then afterwards, whenever at L' , $X = 2 \cdot i$;
- $true \rightarrow X < 32767$: a global invariant, in all states holds that $X < 32767$.