Function Min
$\{true\}$
   if $x < y$ then
      $z := x$;
   else
      $z := y$
$\{(x < y \wedge z = x) \vee (x > y \wedge z = y)\}$

$\{2\text{-Armed conditional Rule}\}$

1) $\{x < y \wedge P\}$
      $z := x$;
   $\{(x < y \wedge z = x) \vee (x > y \wedge z = y)\}$

$\{\text{Assignment Axiom}\}$

$P = ((x < y \wedge z = x) \vee (x > y \wedge z = y))[x/z]$
$= (x < y \wedge x = x) \vee (x > y \wedge x = y)$
$= \text{True} \vee \text{False}$
$= \text{True}$

2) $\{x > y \wedge P\}$
      $z := y$;
   $\{(x < y \wedge z = x) \vee (x > y \wedge z = y)\}$

$\{\text{Assignment Axiom}\}$

$P = ((x < y \wedge z = x) \vee (x > y \wedge z = y))[y/z]$
$= (x < y \wedge y = x) \vee (x > y \wedge y = y)$
$= \text{False} \vee \text{True}$
$= \text{True}$

$\{\text{Precondition Strengthning}\}$

$\{True\} \longrightarrow \{True\}$
$\therefore \ T$

$\{Q.E.D\}$