MODULE $malgtd1ex1$

EXTENDS $Naturals$

CONSTANTS $a,\ b$

VARIABLES $x,\ y$

ASSUME $a \in Nat \land b \in Nat$

$toto \triangleq x = a \land y = b$

actions

$a1 \triangleq$
$\land\ x > y$
$\land\ x' = x - y$
$\land\ y' = y$

$a2 \triangleq x < y \quad \land y' = y - x \land x' = x$

$over \triangleq x = y \land x' = x \land y' = y$

$go \triangleq a1 \lor a2 \lor over$

Propriétés de sûreté à vérifier

$test \triangleq x \neq y$

$prop1 \triangleq x \geq 0$ ok

$prop2 \triangleq x + y \leq a + b$ ok

$tocheck \triangleq prop1 \land prop2$