

```

state(0) of SCC(0):
labels:{}
instant:!(0<=x+y) | !(x<=bound)&0<=x+y

actions:
<!(!(0<=x+y) | !(x<=bound)&0<=x+y)&!guess&x<=bound&0<=x+y ==> next(x) = x+1>
<!(!(0<=x+y) | !(x<=bound)&0<=x+y)&guess&x<=bound&0<=x+y ==> next(x) = y+x*2>
<!(!(0<=x+y) | !(x<=bound)&0<=x+y)&guess&x<=bound&0<=x+y ==> next(y) = y+1>
<!(0<=x+y) | !(x<=bound)&0<=x+y ==> rdy = true>
<true ==> bound = c>
<true ==> x = a>
<true ==> y = b>

```

$x \leq \text{bound} \wedge 0 \leq x+y$

```

state(1) of SCC(1):
labels:{p}
instant:!(x<=bound)

```

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actions:
<!(x<=bound) ==> rdy = true>
<!guess&x<=bound&x<=bound ==> next(x) = x+1>
<guess&x<=bound&x<=bound ==> next(x) = y+x*2>
<guess&x<=bound&x<=bound ==> next(y) = y+1>

```

$x \leq \text{bound}$

$\neg(0 \leq x+y) \mid \neg(x \leq \text{bound}) \wedge 0 \leq x+y$

$\neg(x \leq \text{bound})$

```

state(2) of SCC(2):
labels:{}
instant:true
actions:

```

true