

# 1 Grammar Sets

- Global Variables:  $\{x, y\}$
- Local Variables for Thread t1 :  $\{r1\}$
- Local Variables for Thread t2 :  $\{r2\}$
- Value Set for Thread t1 :  $\{0, 1\}$
- Value Set for Thread t2 :  $\{1\}$

# 2 Configuration

thread t1	thread t2
(i1)create 0	(i11)read y
(i2)write x	(i12)write r2
(i3)write y $\rightarrow$ {t2}	(i13)read r2
(i4)read x	(i14)if $\neg(0)$
(i5)write r1	(i15)create 1
(i6)read r1	(i16)write x
(i7)if $\neg(0)$	(i17)fi
(i8)create 1	
(i9)write y	
(i10)fi	

# 3 Properties

thread t1	thread t2
(i1){0}	(i11){0} $\leftarrow$ {i3}
(i2){0}	(i12){0}
(i3){0}	(i13){0} $\leftarrow$ {i12}
(i4){0} $\leftarrow$ {i2}	(i14){0}
(i5){0}	(i15){1}
(i6){0} $\leftarrow$ {i5}	(i16){1}
(i7){0}	(i17){1}
(i8){1}	
(i9){1}	
(i10){1}	