

1 Grammar Sets

- Global Variables: $\{x, y, z\}$
- Local Variables for Thread t1 : $\{r1\}$
- Local Variables for Thread t2 : $\{r2\}$
- Local Variables for Thread t4 : $\{r0\}$
- Value Set for Thread t1 : $\{0\}$
- Value Set for Thread t3 : $\{1\}$
- Value Set for Thread t4 : $\{1, 42\}$

2 Configuration

thread t1	thread t2	thread t3	thread t4
(i1)create 0 (i2)write x (i3)write y (i4)write $z \rightarrow \{t2, t3, t4\}$ (i5)read x (i6)write r1 (i7)read r1 (i8)if(0) (i9)read r1 (i10)write y (i11)fi	(i12)read y (i13)write r2 (i14)read r2 (i15)if $\neg(0)$ (i16)read r2 (i17)write x (i18)fi	(i19)create 1 (i20)write z	(i21)read z (i22)write r0 (i23)read r0 (i24)if(1) (i25)create 42 (i26)write x (i27)fi

3 Properties

thread t1	thread t2	thread t3	thread t4
(i1) $\{0\}$ (i2) $\{0\}$ (i3) $\{0\}$ (i4) $\{0\}$ (i5) $\{0, 42\} \leftarrow \{i2, i26\}$ (i6) $\{0, 42\}$ (i7) $\{0, 42\} \leftarrow \{i6\}$ (i8) $\{0, 42\}$ (i9) $\{0, 42\} \leftarrow \{i6\}$ (i10) $\{0, 42\}$ (i11) $\{0, 42\}$	(i12) $\{0\} \leftarrow \{i3\}$ (i13) $\{0\}$ (i14) $\{0\} \leftarrow \{i13\}$ (i15) $\{0\}$ (i16) $\{0\} \leftarrow \{i13\}$ (i17) $\{0\}$ (i18) $\{0\}$	(i19) $\{1\}$ (i20) $\{1\}$	(i21) $\{0, 1\} \leftarrow \{i4, i20\}$ (i22) $\{0, 1\}$ (i23) $\{0, 1\} \leftarrow \{i22\}$ (i24) $\{0, 1\}$ (i25) $\{42\}$ (i26) $\{42\}$ (i27) $\{42\}$