

8_1_write-write

process 1	process 2
write (x, 1)	read (y, r1)
write (y,1)	read (x, r2)

forbidden: r1=1, r2=0

8_2_read-write

process 1	process 2
read (x, r1)	read (y, r2)
write (y, 1)	write (x, 1)

forbidden: r1=1, r2=1;

8_3_write-read

process 1	process 2
write (x, 1)	write (y, 1)
read (y, r1)	read (x, r2)

allowed: r1 = 0, r2 = 0

8_4_write-read with same location

process 1
write (x, 1)
read (x,r1)

forbidden: r1=0

8_5_forwarding

process 1	process 2
write (x, 1)	write (y, 1)
read (x,r1)	read (y, r3)
read (y, r2)	read (x, r4)

allowed: r2=0, r4=0

8_6_stores (transitiv causality)

process 1	process 2	process 3
write (x, 1)	read (x, r1)	read (y, r2)
	write (y, 1)	read (x, r3)

forbidden: r1 = 1, r2=1, r3=0; allowed: r1=1, r2 =1, r3=1

8_7_iriw

process 1	process 2	process 3	process 4
write (x, 1)	write (y, 1)	read (x, r1)	read (y, r3)
		read (y, r2)	read (x, r4)

forbidden: r1=1, r2=0, r3=1, r4=0;

3.6. read speculation

process 1	process 2	process 3
write (x, 2)	write (y, 1)	read (x, r2)
read (y, r1)	write (x, 1)	read (y, r3)

allowed: r1=0, r2=1, r3=2

3.12 write to a location are serialized

process 1	process 2	process 3	process 4
write (x, 1)	write (x, 2)	read (x, r1)	read (x, r3)
		read (x, r2)	read (x, r4)

forbidden: r1= 1, r2=2, r3=2, r4=1

3.15 Transitivity through write serialisation

process 1	process 2	process 3	process 4
write (y, 1)	write (x, 2)	read (x, r1)	read (z, r3)
write (x, 1)	write (z, 1)	read (x, r2)	read (y, r4)

forbidden: r1 = 1, r2 = 2, r3 = 1, r4 = 0

3.17 fence

process 1	process 2
write (x, 1)	write (y, 1)
mfence	mfence
read (y, r1)	read (x, r2)

forbidden: r1 = 0, r2 = 0;

3.18 fence_2

process 1	process 2
write (x, 1)	write (y, 1)
mfence	mfence
read (x, r1)	read (y, r3)
read (y, r2)	read (x, r4)

forbidden: r2 = 0, r4 = 0;