

Run1:	ar	rr	aw	ww	CountGuard-Sem	R-sem
	0	0	0	0	1	0
W1...					0	
			1			
				1		
					1	
R1[1]					0	
R1[2]	1					
R1[3..5]					1	
R1[6]						0 ← R1
R2[1]					0	
R2[2]	2					
R2[3..5]					1	
R2[6]						0 ← R1,R2
...W1					0	
			0			
				0		
						0 ← R2
						0 ← R1
					1	

Readers (R1 and R2) execute:

- [1] *wait (CountGuard-sem)*
- [2] ar = ar+1
- [3] if aw=0 then rr = rr+1; must\_wait = false
- [4] else must\_wait = true
- [5] *signal (CountGuard-sem)*
- [6] if must\_wait then *wait (R-sem)*

Run1:	ar	rr	aw	ww	CountGuard-Sem	R-sem
	0	0	0	0	1	0
W1...					0	
R1						
R1						
R1						
R1						
R2						
R2						
R2[3..5]					1	
R2[6]						0 ← R1,R2
...W1					0	
			0			
				0		
						0 ← R2
						0 ← R1
					1	

Readers (R1 and R2) execute:

- [1] *wait (CountGuard-sem)*
- [2] ar = ar+1
- [3] if aw=0 then rr = rr+1; must\_wait = false
- [4] else must\_wait = true
- [5] *signal (CountGuard-sem)*
- [6] if must\_wait then *wait (R-sem)*

Run2:	ar	rr	aw	ww	CountGuard-Sem	R-sem
	0	0	0	0	1	0
W1...					0	
			1			
				1		
					1	
R1[1]					0	
R1[2]	1					
R1[3..5]					1	
R1[6]						0 ← R1
R2[1]					0	
R2[2]	2					
R2[3..5]					1	
...W1					0	
			0			
				0		
						0
						1
					1	
R2[6]						0