Thread Trace: (BUGGED) Producer/Consumer - Single CV and If

t	T_{c1}	State	T_{c2}	State	T_p	State	Count	Comment
1	c1	Running		Ready		Ready	0	
2	c2	Running		Ready		Ready	0	
3	c3	Asleep		Ready		Ready	0	Buffer empty; must sleep
4		Asleep		Ready	p1	Running	0	
5		Asleep		Ready	p2	Running	0	
6		Asleep		Ready	p4	Running	1	Buffer now full
7		Ready		Ready	p5	Running	1	T_{c1} awoken
8		Ready		Ready	p6	Running	1	
9		Ready		Ready	p1	Running	1	
10		Ready		Ready	p2	Running	1	
11		Ready		Ready	р3	Asleep	1	Buffer full; must sleep
12		Ready	c1	Running		Asleep	1	T_{c2} sneaks in
13		Ready	c2	Running		Asleep	1	
14		Ready	c4	Running		Asleep	0	and grabs the data
15		Ready	c5	Running		Ready	0	T_p awoken
16		Ready	c6	Running		Ready	0	-
17		Ready	c1	Running		Ready	0	
18		Ready	c2	Running		Ready	0	
19		Ready	c3	Asleep		Ready	0	Buffer empty; must sleep
20	c4	Running		Ready		Ready	0	Oops! No data