

**UPPSALA UNIVERSITY
DEPARTMENT OF INFORMATION TECHNOLOGY**

**COMPUTER SYSTEMS/OPERATING SYSTEMS
Fall, 2007**

IN-CLASS EXERCISE 5

Using the code in slide 24 of today's class (class9.ppt), complete the following table by determining the values of semaphores s and $delay$ and the count n for each of the statements listed. This sequence will show the problem with the solution in slide 24.

	Producer	Consumer	s	n	delay
1			1	0	0
2	semWaitB(s)				
3	n++				
4	if (n==1) semSignalB(delay)				
5	semSignalB(s)				
6		semWaitB(delay)			
7		semWaitB(s)			
8		n--			
9		semSignalB(s)			
10	semWaitB(s)				
11	n++				
12	if (n==1) semSignalB(delay)				
13	semSignalB(s)				
14		if (n==0) semWaitB(delay)			
15		semWaitB(s)			
16		n--			
17		semSignalB(s)			
18		if (n==0) semWaitB(delay)			
19		semWaitB(s)			
20		n--			
21		semSignalB(s)			