

Partie 1

Process	Code	in	A.in	B.in	C.in	S[6]	S[7]	out	D.out	D.name
		6	∅	∅	∅	∅	∅	6	∅	∅
C	1				6					
B	1,2			6		B				
A	1		6							
B	3	7								
A	2,3	7				A				
D	4,5,6,7							7	6	A
C	2,3	7				C				
D	4,5,6,7							8	7	∅

A is printed

Error in printing (whereas in > out)

Partie 2

scheduling		Cycle	sem		Section	A state	B state	C state	D state
Process	Code		value	Q					
		0	false	∅	∅	ready	ready	ready	ready
B	1,2	2	true		B				
D	1	3							
A	1,2	5		A		blocked			
B	3,4,5	8		A		ready			
D	2	9		D				blocked	
C	1,2	11		C,D				blocked	
A	3,4,5	14		C	D				ready
D	3,4,5	17			∅			ready	
C	3,4,5	20	false		C				

B accesses

A blocked

B frees A and gives section and ends

D blocked

C blocked

A frees D and ends

D frees C and ends

C frees the mutex and ends

	q0	access	w
A	5	8	3
B	2	2	0
C	11	17	6
D	9	14	5

Partie 3

scheduling		Cycle	RA	RB	RC	Lock	Section
Process	Code						
B	1	1	∅	∅	∅	1	∅
A	1,2	3	1			0	A
C	1,2,3,2	7			0		
B	2,3,2,3	11		0			
A	3,4	13					
B	2,3	15					
C	3,2	17					
A	5	18				1	∅
B	2,3,4,5	22		1		0/1	B
C	3,2,3,4,5	27			1	0/1	C

A accesses

C blocked

B blocked

A continues

B still blocked

C still blocked

A finishes

B accesses

C accesses

	q0	access	w
A	3	3	0
B	8	19	11
C	5	24	19

scheduling		Cycle	turn	A	B	Section
Process	Code					
			∅	false	false	∅
A	1,2	2	∅	true	false	∅
B	1,2,3	5	A	true	true	∅
A	3,4,5	8	B	true	true	∅
B	4	9	B	true	true	B
A	4,5,4,5	13	B	true	true	B
B	6,7	15	B	true	false	B-∅
A	4,6,7	18	B	false	false	A-∅
B	1,2,3,4,6,7	24	A	false	false	B-∅

A tries to access

B accesses the section

A still try to access the section

B frees the section

A can access due to flags and frees the section

B can access due to flags and frees the section

	q0	access	w
A	7	16	9
B1	9	9	0
B2	22	22	0