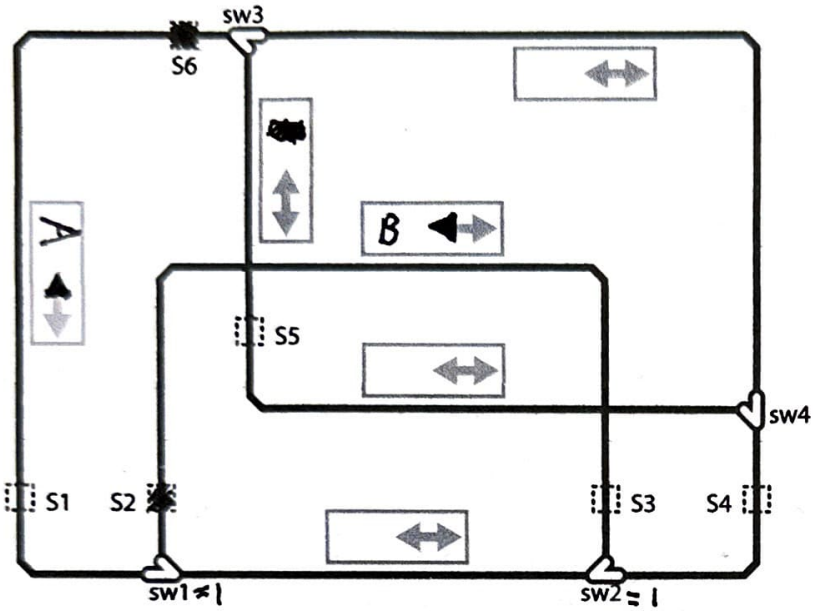
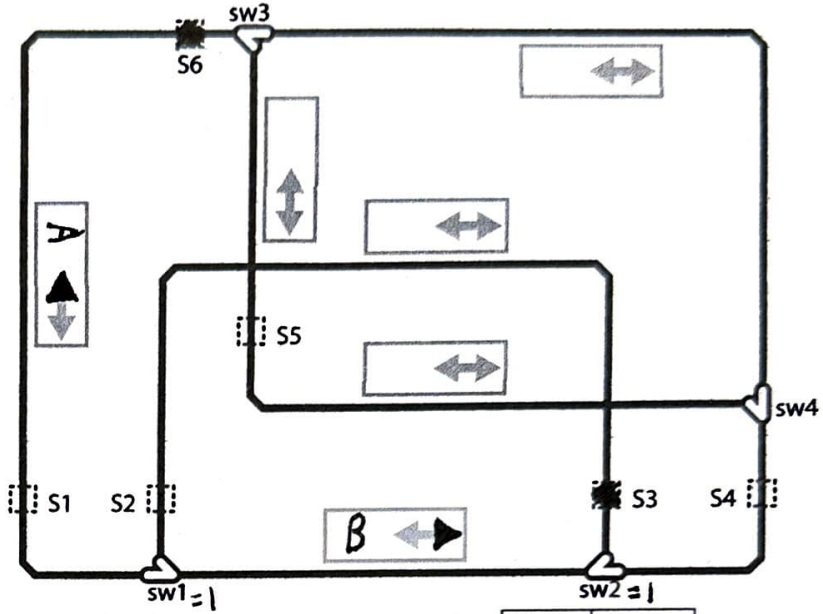


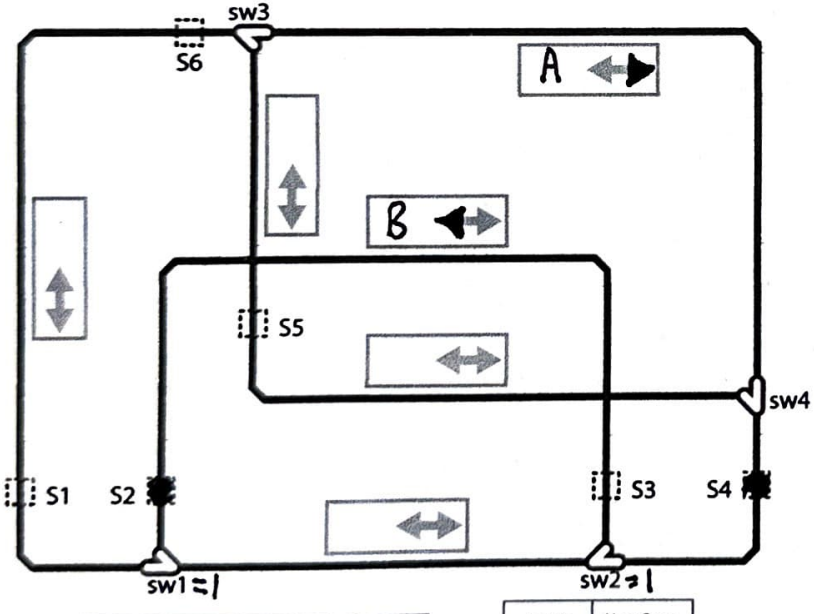
State: init

Input	Next State
S2	A init B down
S6	A top B init
S2·S6	A top B down



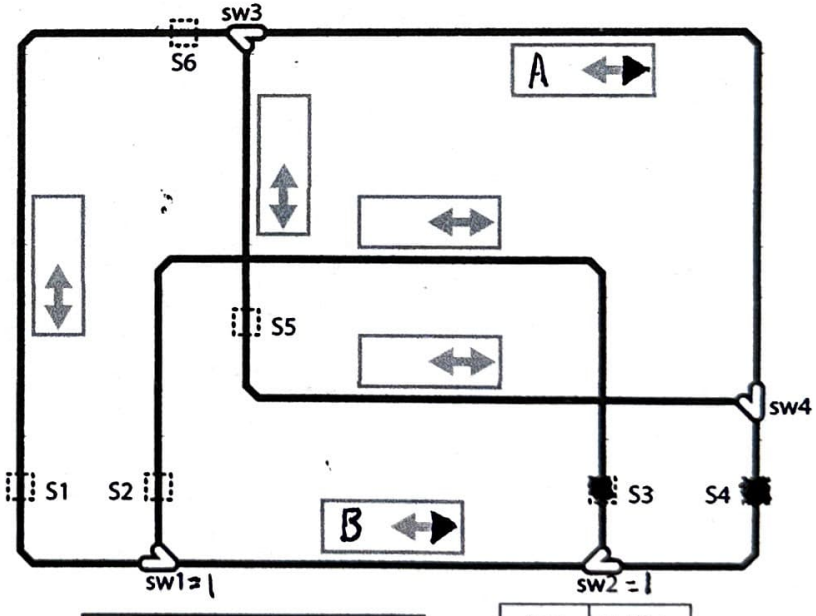
State: A init B down

Input	Next State
S3	init
S6	A top B down
S3·S6	A top B init



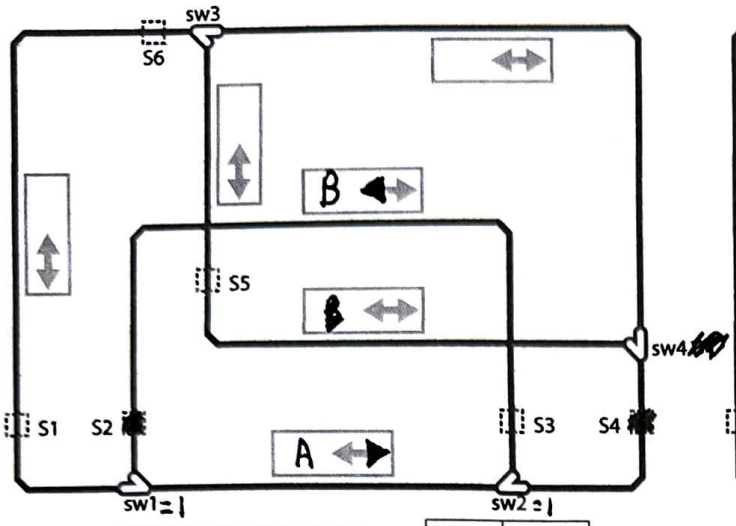
State: A top B init

Input	Next State
S2	A top B down
S4	A bot B init
S2·S4	A·B



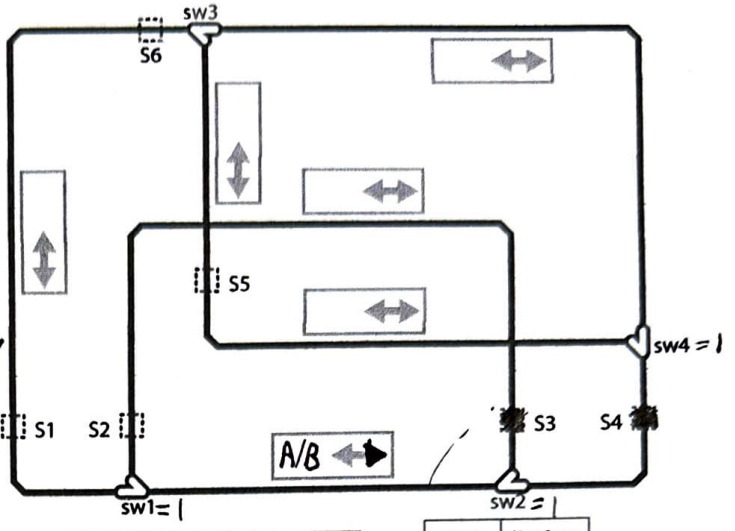
State: A top B down

Input	Next State
S3	A top B init
S4	A·B
S3·S4	A bot B init



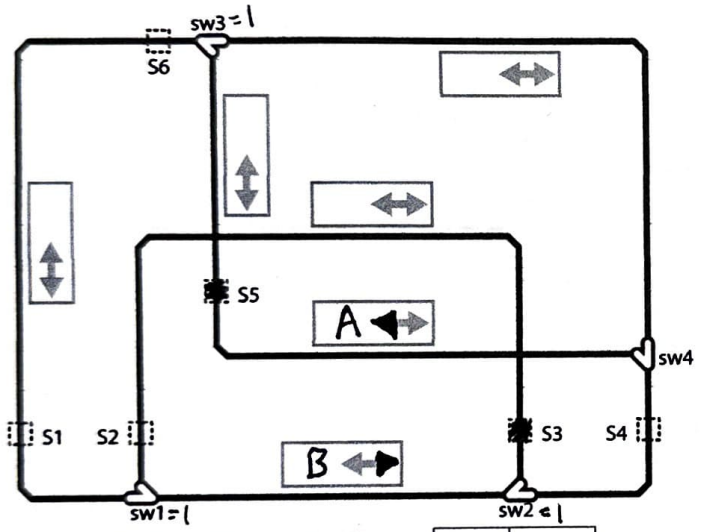
State: Abot Binit

Input	Next State
S2	A.B
S4	A to B init
S2.S4	A to 2 B down



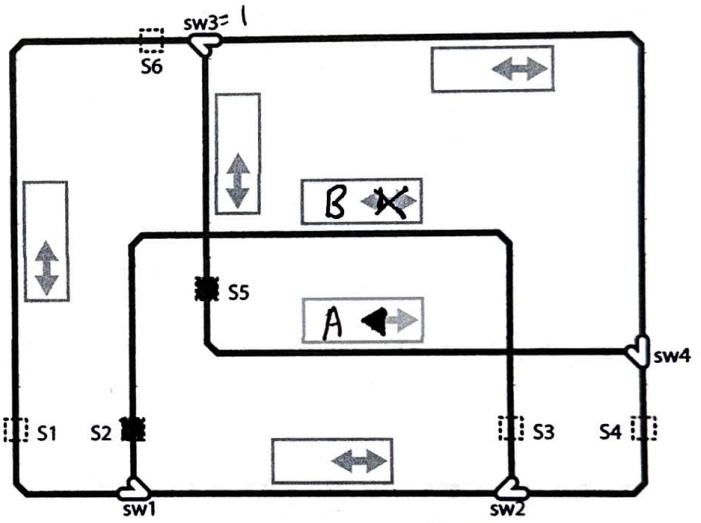
State: A.B

Input	Next State
S3	A bot B init
S4	A mid B down
S3.S4	A mid B init



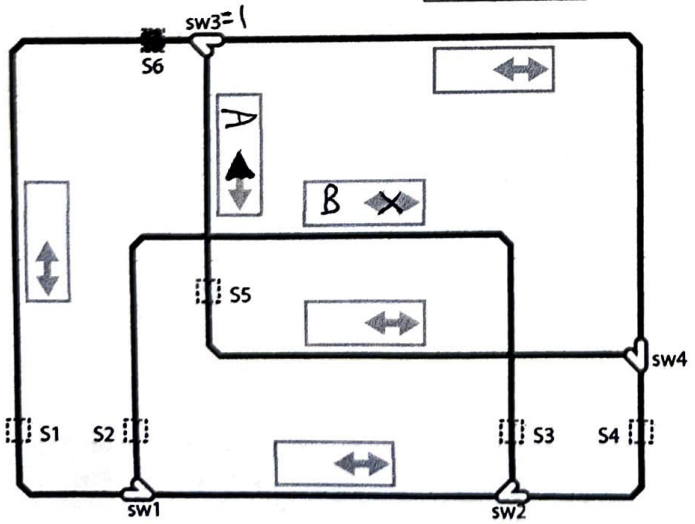
State: Amid B down

Input	Next State
S3	Amid B init
S5	A left B down
S3.S5	A left B init



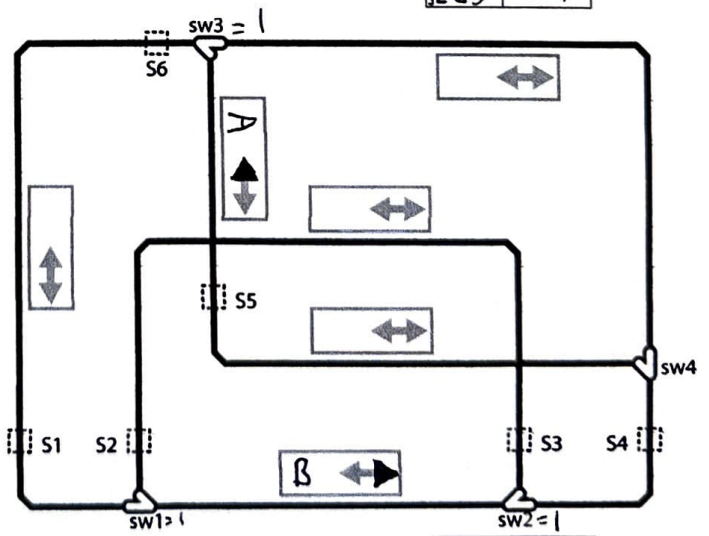
State: Amid B init

Input	Next State
S2	—
S5	A left B init
S2.S5	—



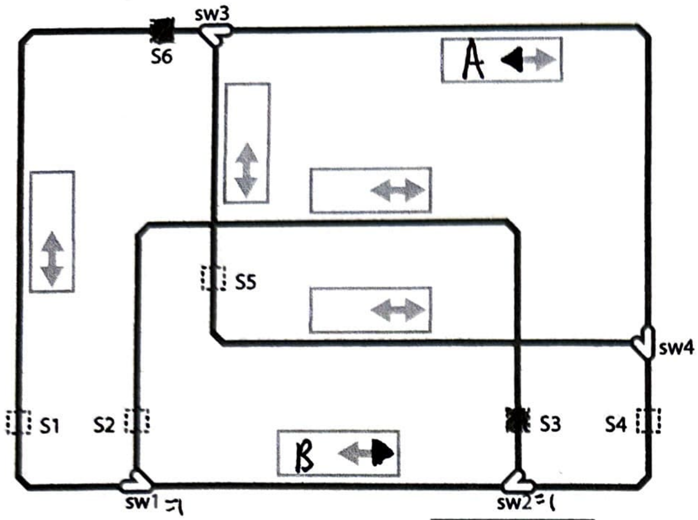
State: A left B init

Input	Next State
S2	—
S6	init
S2.S6	—



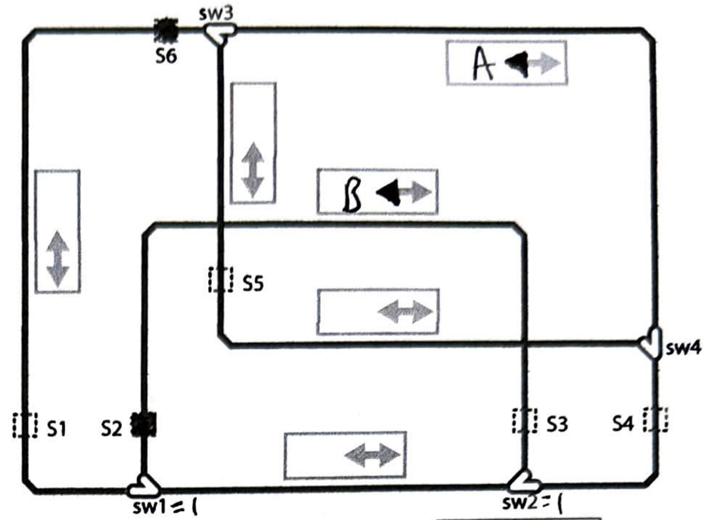
State: A left B down

Input	Next State
S3	A left B init
S6	A init B down
S3.S6	init



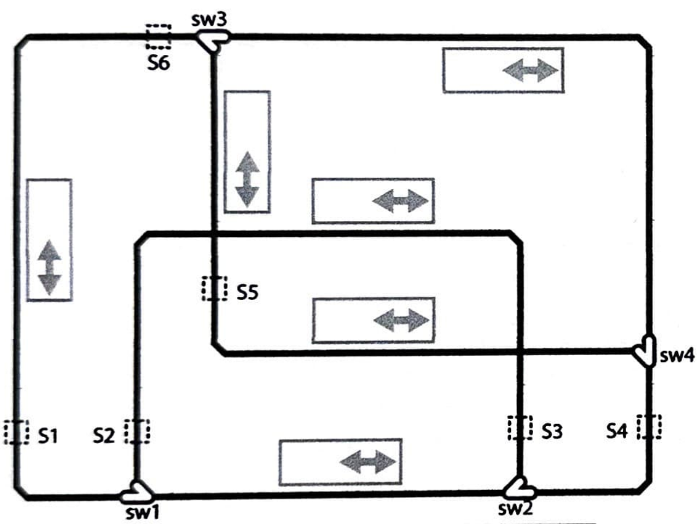
State: Atop2B down

Input	Next State
S3	Atop2Binit
S6	AinitBdown
S3·S6	init



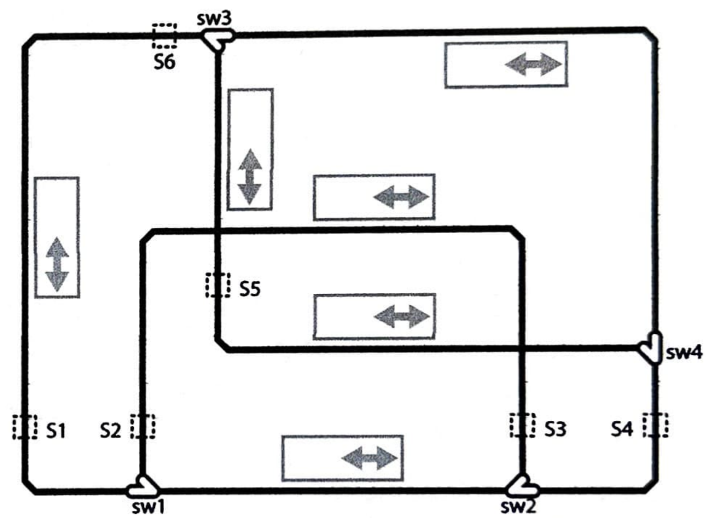
State: Atop2Binit

Input	Next State
S2	Atop2B down
S6	init
S2·S6	AinitBdown



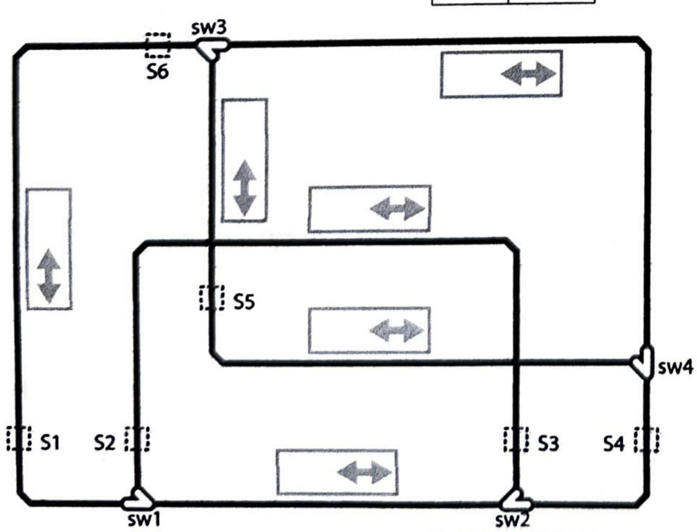
State:

Input	Next State



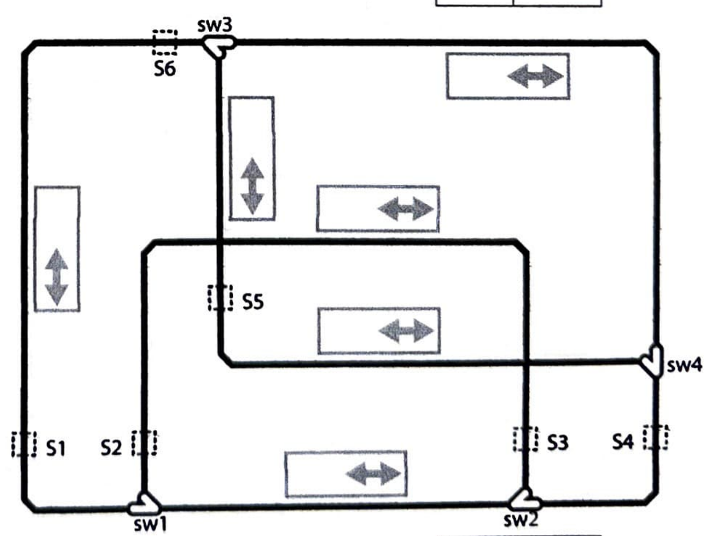
State:

Input	Next State



State:

Input	Next State



State:

Input	Next State

Outputs	States							
	init	AtopBdown	AtopBinit	AbotBinit	A·B	AmidBdown	AmidBinit	
Sw1	1	1	1	1	1	1	1	0
Sw2	1	1	1	1	1	1	1	0
Sw3	0	0	0	0	0	0	1	1
Sw4	0	0	0	0	0	1	0	0
DA[1..0]	01	01	01	01	10	10	10	10
DB[1..0]	01	01	01	01	01	01	01	00

Outputs	States							
	AleftBinit	AleftBdown	AtopZBdown	AtopZBinit				
Sw1	0	1	1	1				
Sw2	0	1	1	1				
Sw3	1	1	0	0				
Sw4	0	0	0	0				
DA[1..0]	10	10	10	10				
DB[1..0]	00	01	01	01				

Outputs	States							
Sw1								
Sw2								
Sw3								
Sw4								
DA[1..0]								
DB[1..0]								