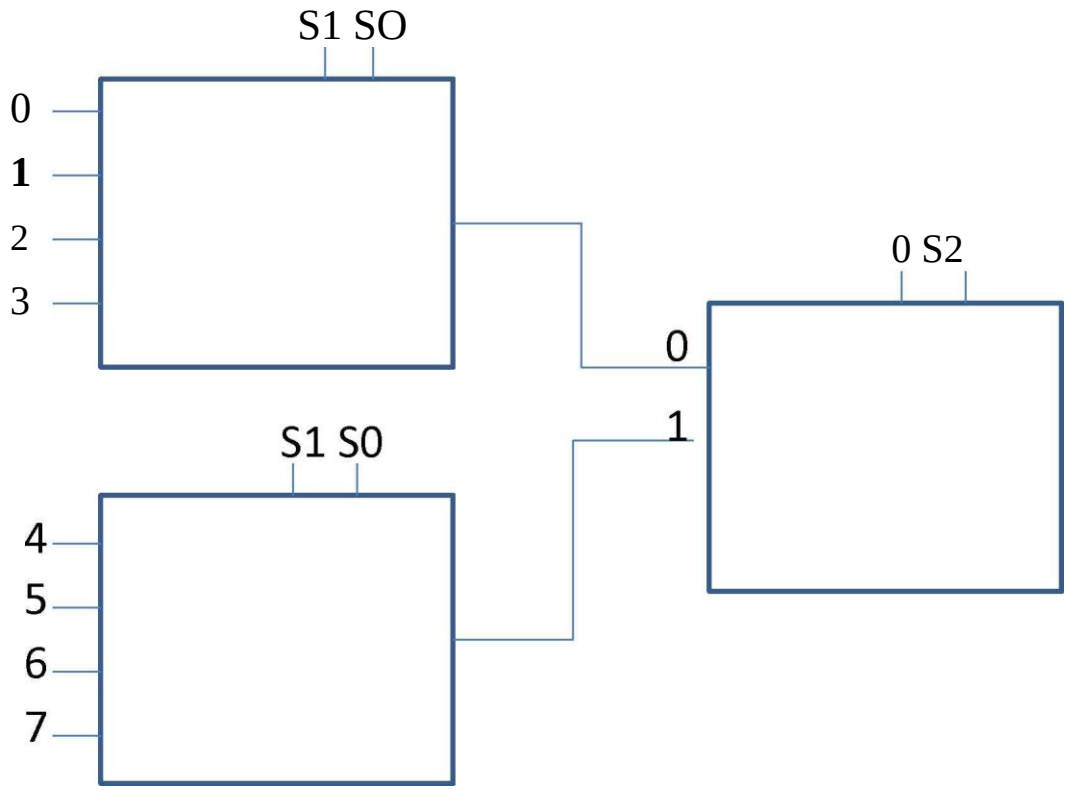
Cau 1:

	S2	S1	S0
0	0	0	0
1	0	0	1
2	0	1	0
3	0	1	1
4	1	0	0
5	1	0	1
6	1	1	0
7	1	1	1

0.5d



1.5d

Cau 2:

1 (1d)

	A	B	C	D	E
P1	2×10^6	2×10^6	3×10^6	2×10^6	1×10^6
P2	2×10^6	2×10^6	3×10^6	2×10^6	1×10^6

2 (1d)

Time_A = (Ins_A * CPI_A) / ClockRate_A

Time CPU = Time A + Time B + Time C + Time D

	A	B	C	D	E	CPU Time
P1	0.5×10^{-3}	1×10^{-3}	1.5×10^{-3}	3×10^{-3}	1.25×10^{-3}	7×10^{-3}
P2	1.0×10^{-3}	1.0×10^{-3}	1.0×10^{-3}	2.5×10^{-3}	0.83×10^{-3}	6×10^{-3}

3 (1d)

CPI1 = (time1 * clock_Rate_P1) / Ins

CPI2 = (time2 * clock_Rate_P2) / Ins

	CPI
P1	2.8
P2	3.6

Cau 3:

1. 8D49 000C

lw $t1, 12($t2)

2. addi $s1, $t1, -4

```
addi   $s1   $t1   -4   =>   I(op:8(addi)   rs:9(t1)   rt:17(s1)   immed:0x0000fffc)
```

0.5d

```
2131fffc
001000 01001 10001 1111 1111 1111 1100
```

0.5d

3.

i, n luu trong $s0, $s1
n/2 luu trong $s2
A dia chi nen luu trong $s3

```
        add $s0, $0, $0
For: beq $s0, $s2, EndFor
        sll $t0, $s0, 2
        add $t0, $t0, $s3
        lw $t0, 0($t0)
        addi $t1, $s1, -1
        sub $t1, $t1, $s0
        sll $t1, $t1, 2
        add $t1, $t1, $s3
        sw $t0, 0($t1)
        addi $s0, $s0, 1
        j For
EndFor:
```

0.5d

1d

1d

0.5d