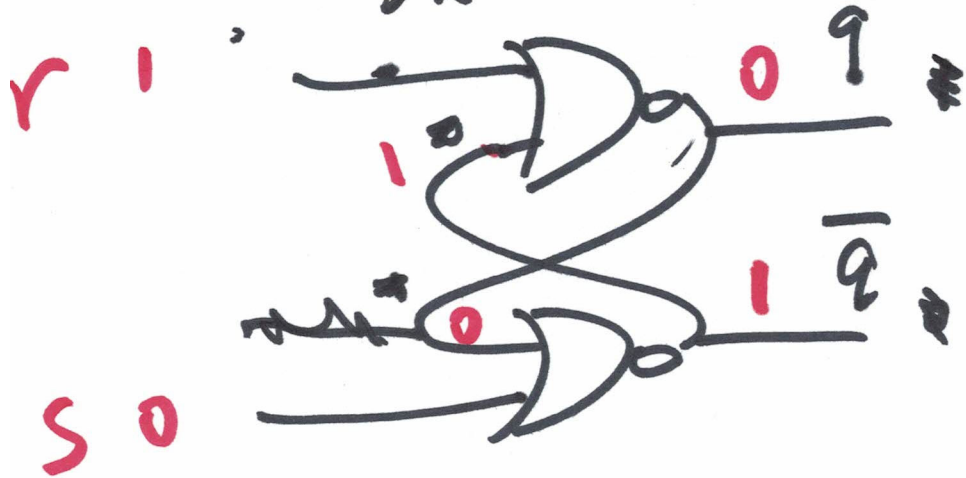


SR latch



$$\overline{1+A} = 0$$

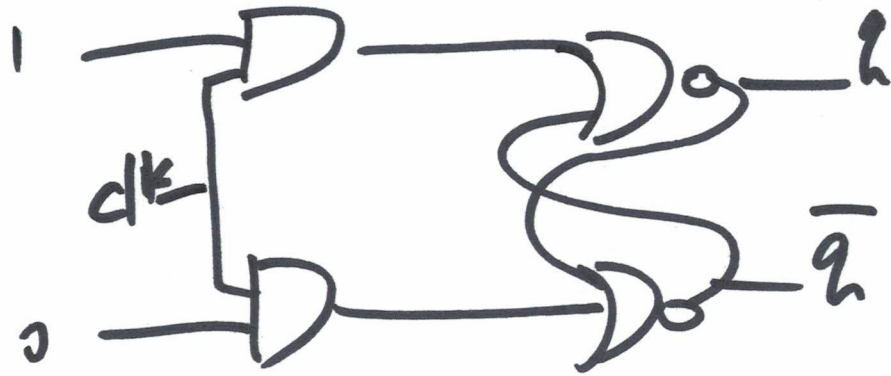
S	R	Q	$\bar{Q}$
0	0	memory	
0	1	normal	
1	0	normal	
1	1	unused	



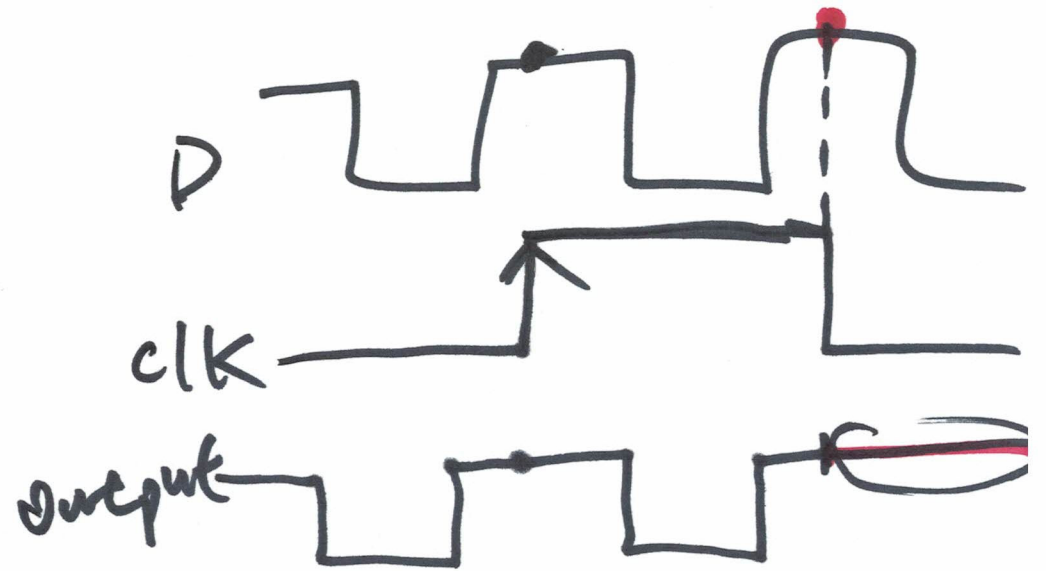
$$0 + A = A$$

$$\overline{0 + A} = \bar{A}$$

(2)



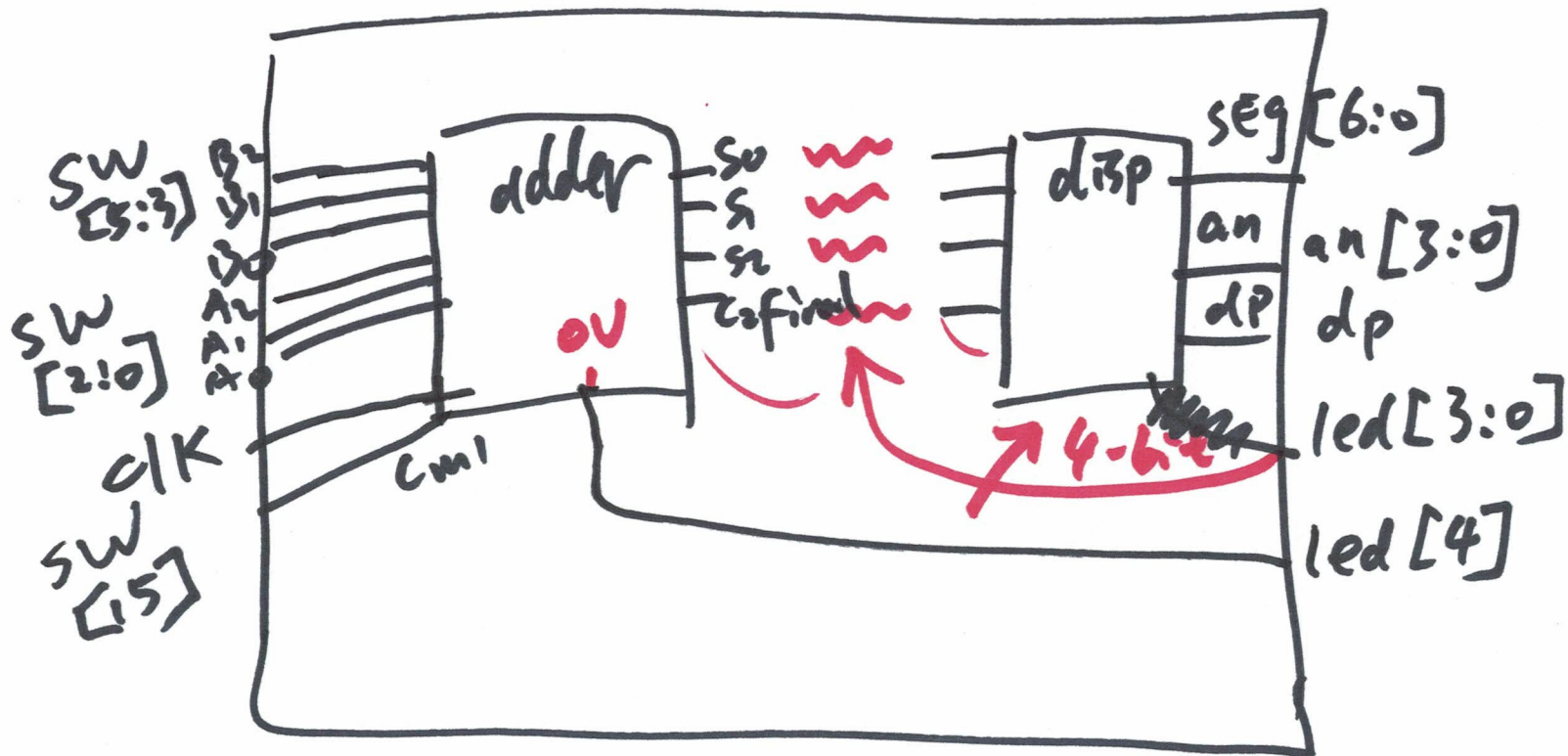
$0 \cdot A = 0$



(2)

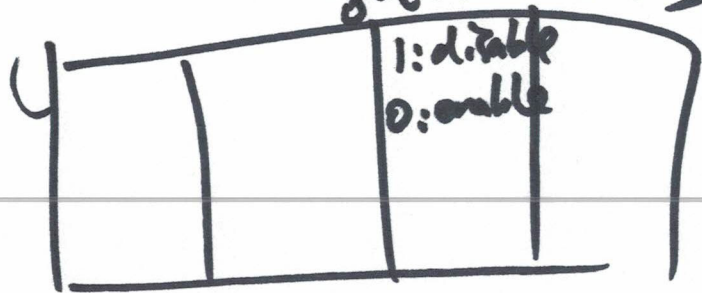
# Task 1:

wire digit-wire;  
[3:0]



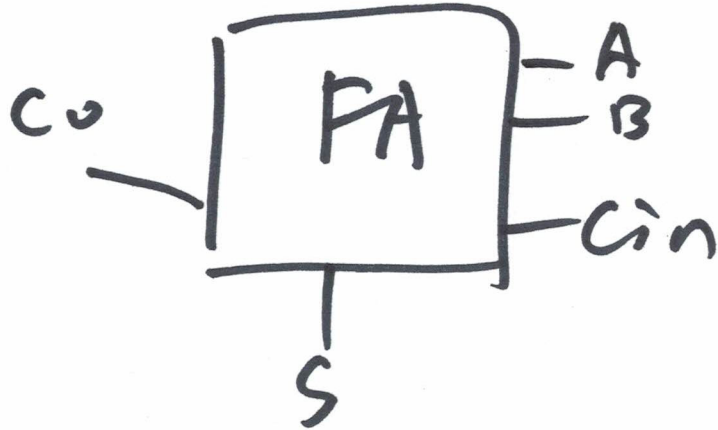
$$OV = c^1, c_2$$

assign led [3:0] = digit-wire;  
an[1] an[0]



$$S = A \oplus B \oplus C_{in}$$

$$C_o = (A + B)C_{in} + AB$$



{ if overflow occurs  $\rightarrow$  adopt  $C_2$   
| if no overflow  $\rightarrow$  duplicate  $S_2$

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