

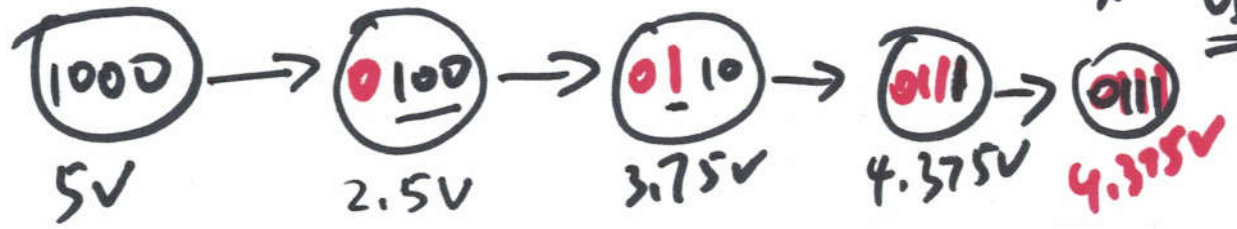
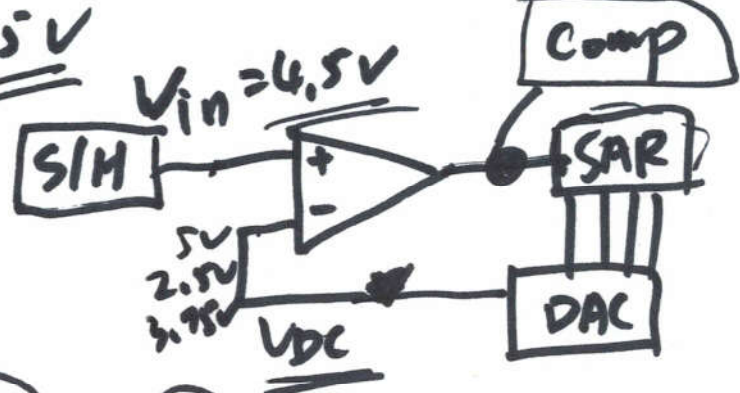
SAR Logic

4-bit ADC

cycle #	D_3	D_2	D_1	D_0	Comparator Output
1	1	0	0	0	A_3
2	A_3	1	0	0	A_2
3	A_3	A_2	1	0	A_1
4	A_3	A_2	A_1	1	A_0
5	A_3	A_2	A_1	A_0	

①

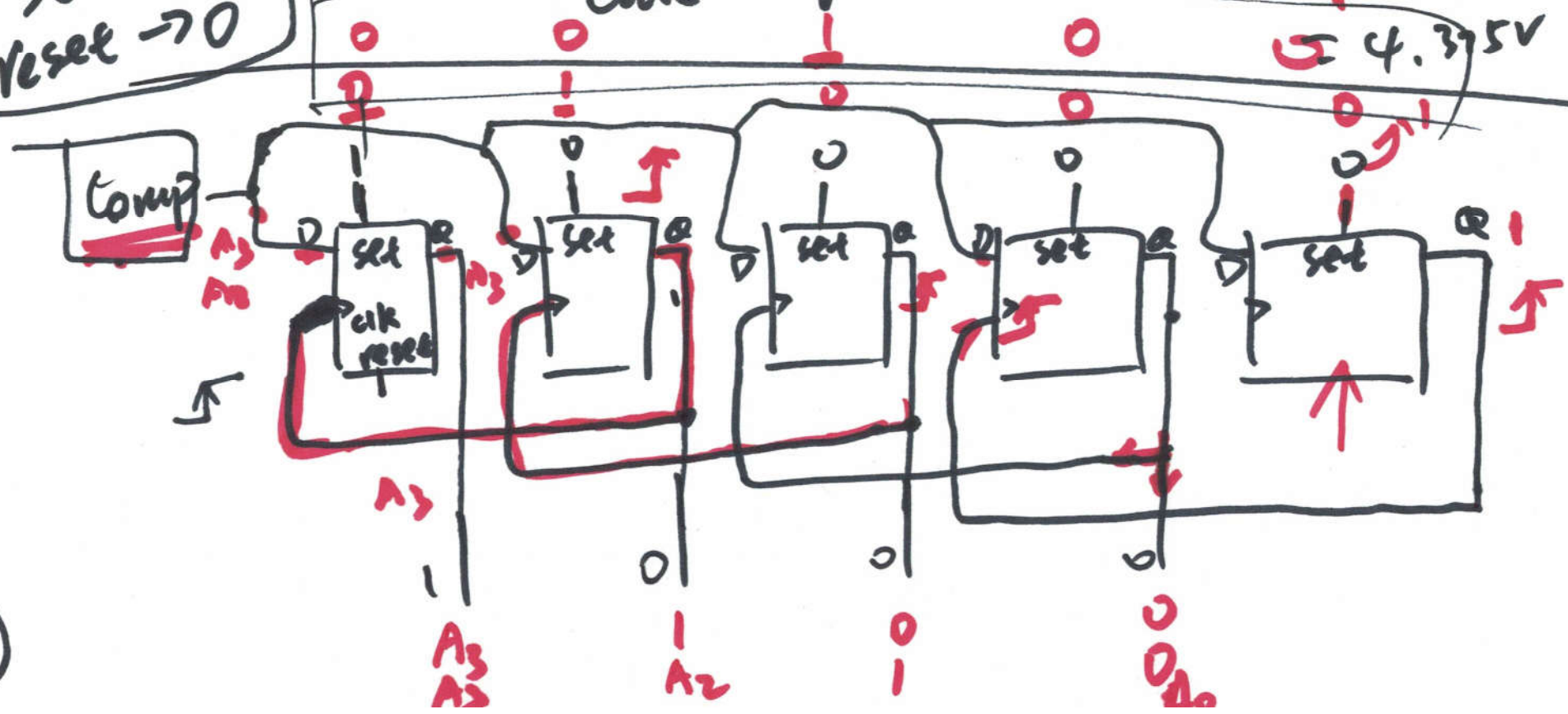
$V_{REF} = 10V$, $V_{in} = 4.5V$



$1000 - 1 \text{ LSB}$
 $= 0111$
 $= 5V - 0.625$
 $= 4.375V$

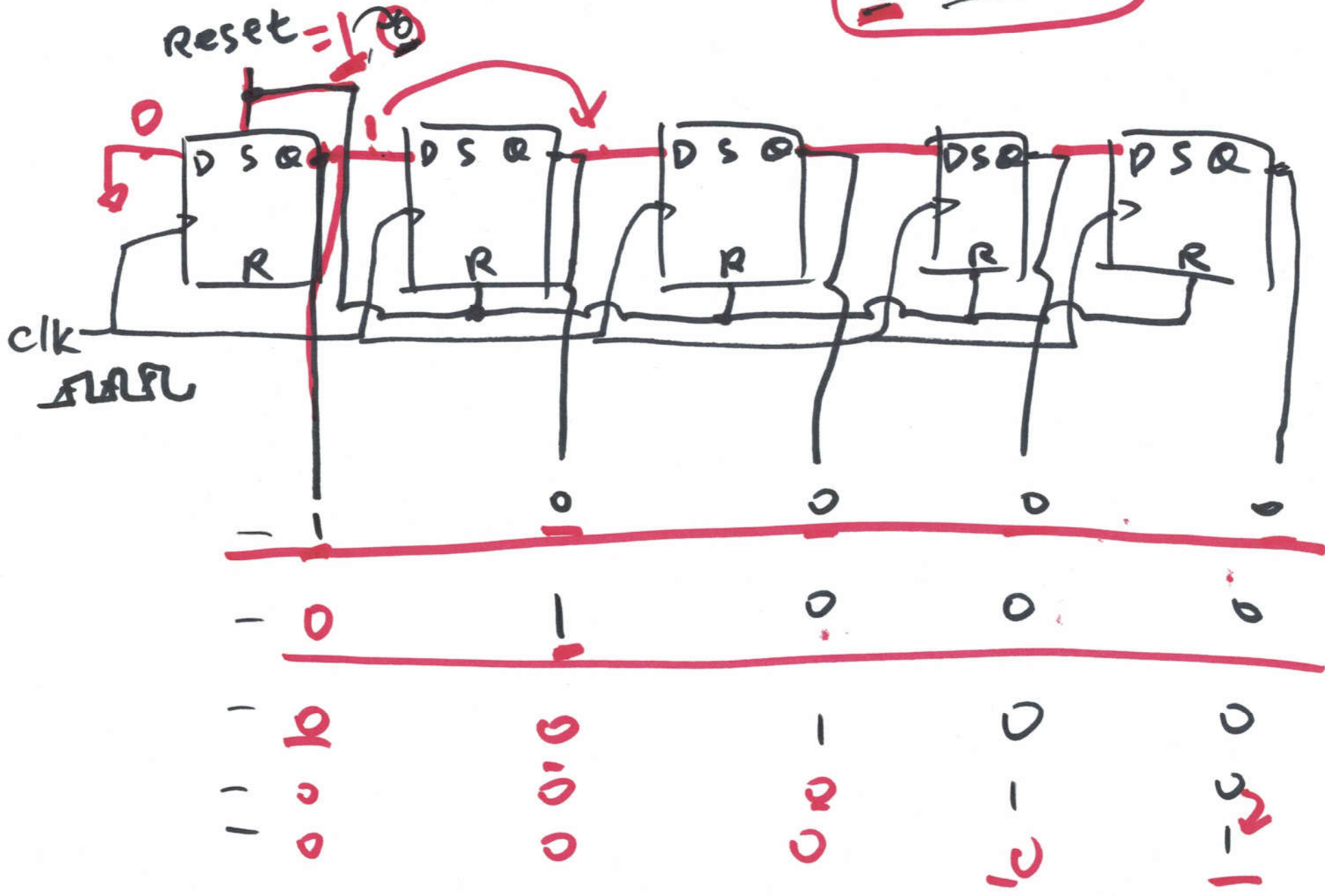
set \rightarrow \uparrow
 reset \rightarrow 0

Code Register



Sequencer

| → Set
| → Reset



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