LAB 2

Pre-Lab's

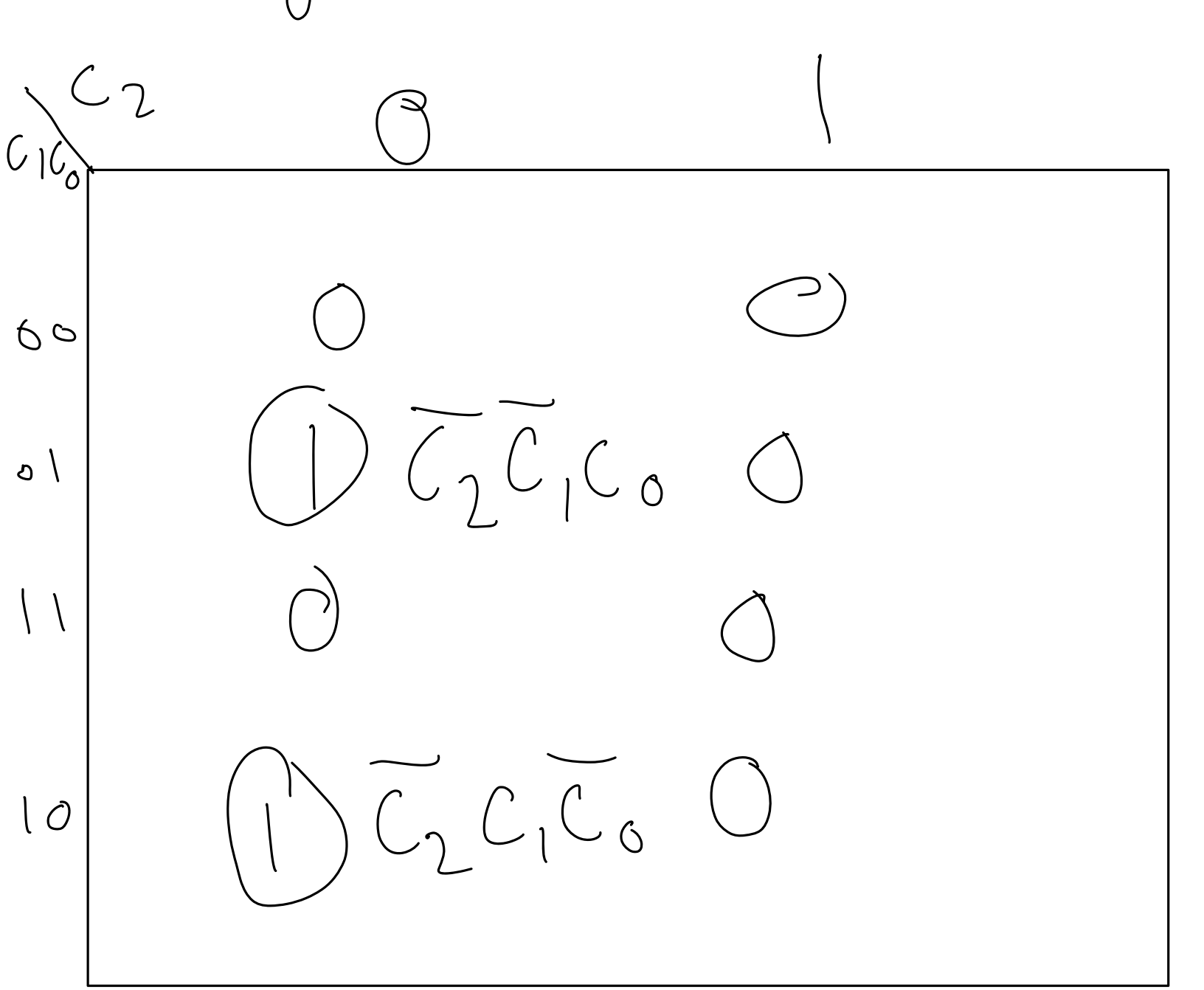
ones and zeros. The first couple of entries are done for your convenience

C_0 C_1 C_2

LIGHTS		CLOCK INPUT BITS			LIGHT 1			LIGHT 2		
1	2	C2	C1	C0	G	Y	R	G	Y	R
R	R	0	0	0	0	0	1	0	0	1
G	R	0	0	1	1	0	0	0	0	1
G	R	0	1	0	1	0	0	0	0	1
Y	R	0	1	1	0	1	0	0	0	1
R	R	1	0	0	0	0	1	0	0	1
R	G	1	0	1	0	0	1	1	0	0
R	G	1	1	0	0	0	1	1	0	0
R	Y	1	1	1	0	0	1	0	1	0

LAB 2 & 3 Differences

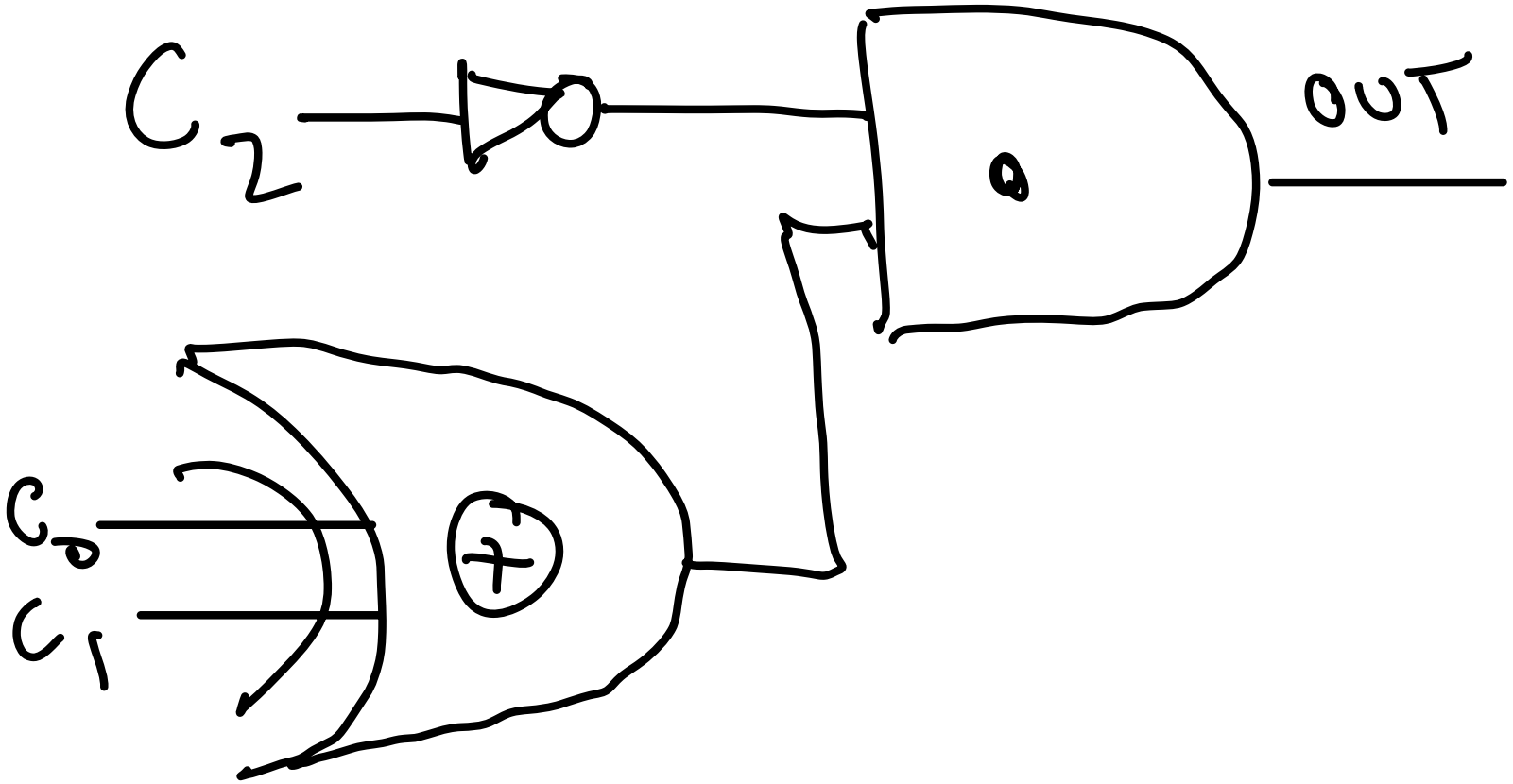
a) Light 1 Green



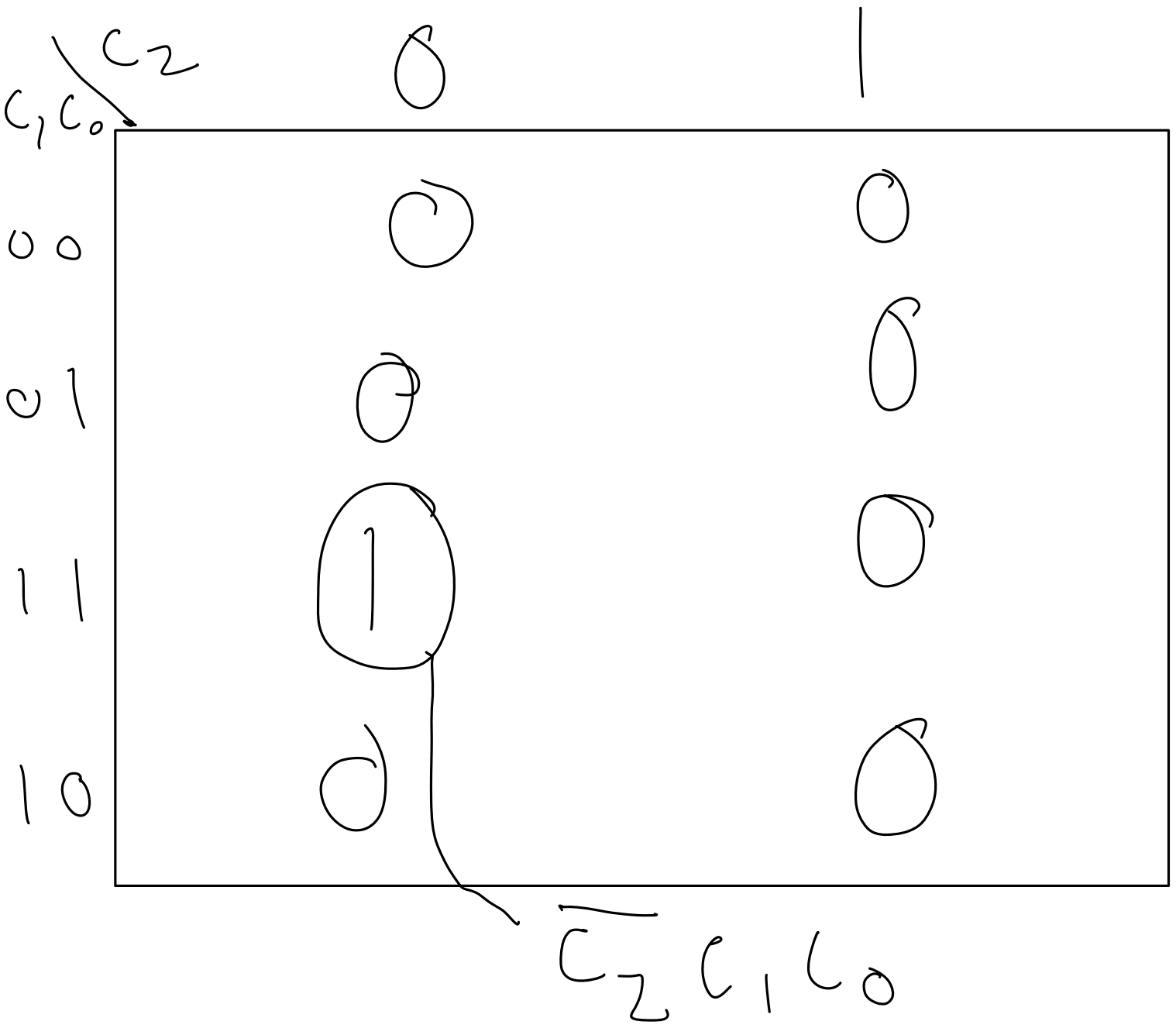
Sop: $\bar{C}_2\bar{C}_1C_0 + \bar{C}_2C_1\bar{C}_0$

$= \overline{C_2(C_1 \oplus C_0)}$

Light 1, Green



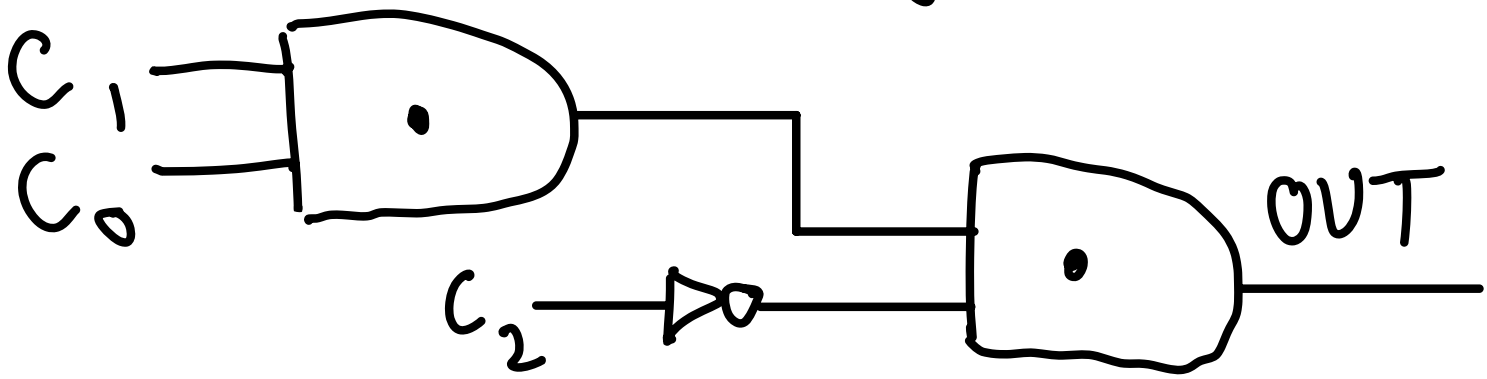
b) Light 1 Yellow

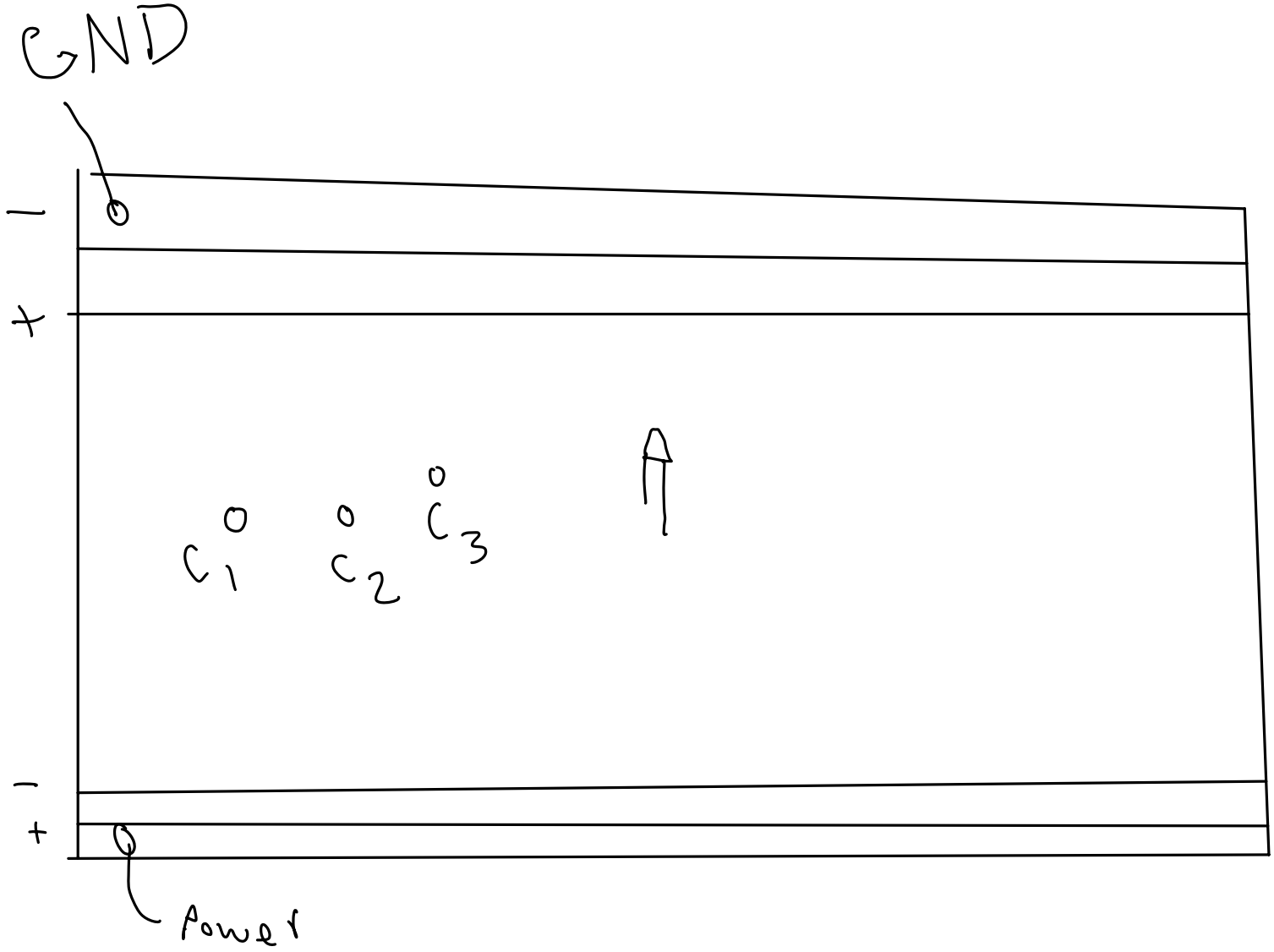


$\overline{C_2}C_1C_0$

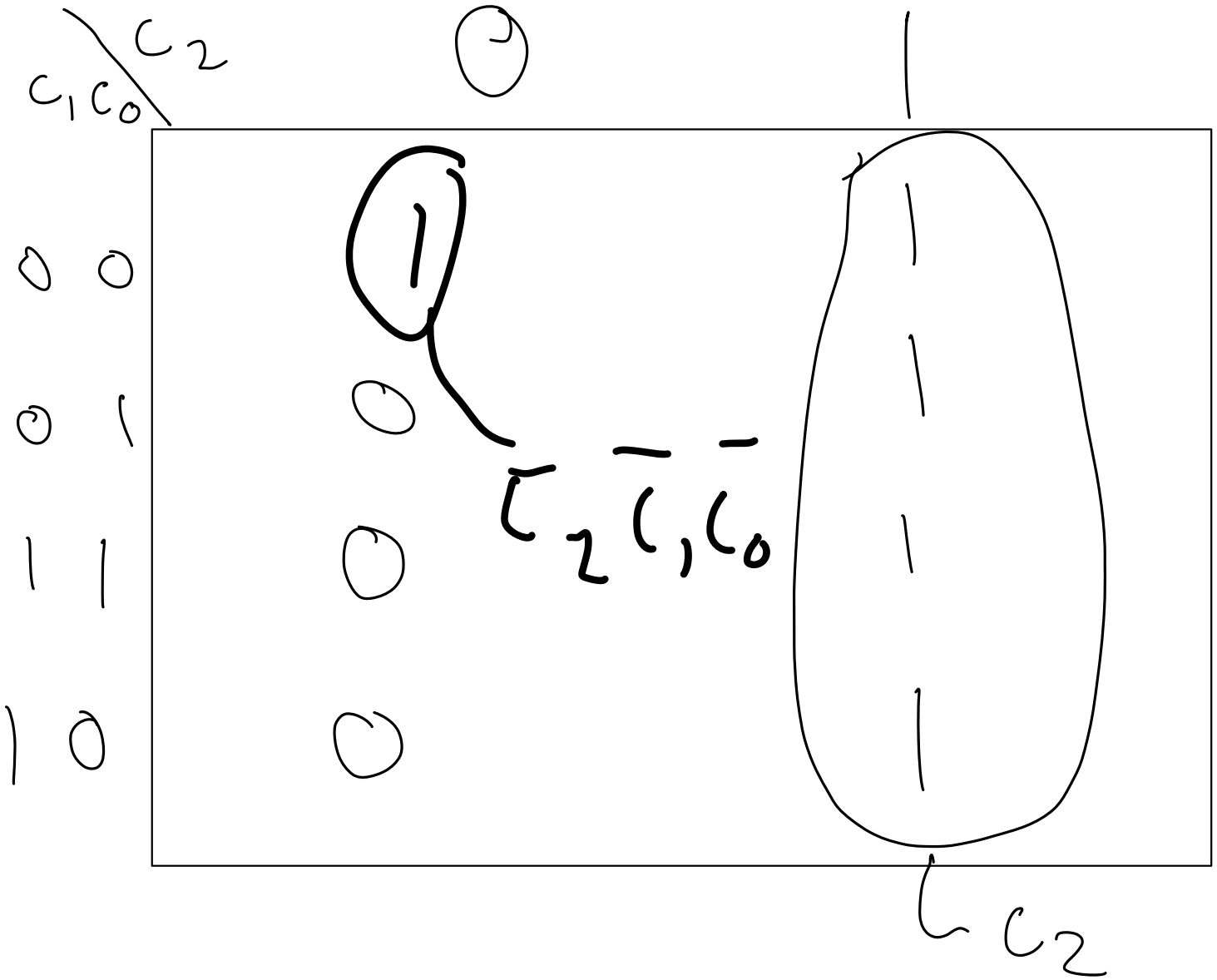
SOP: $\overline{C_2}C_1C_0$

Light 1, Yellow





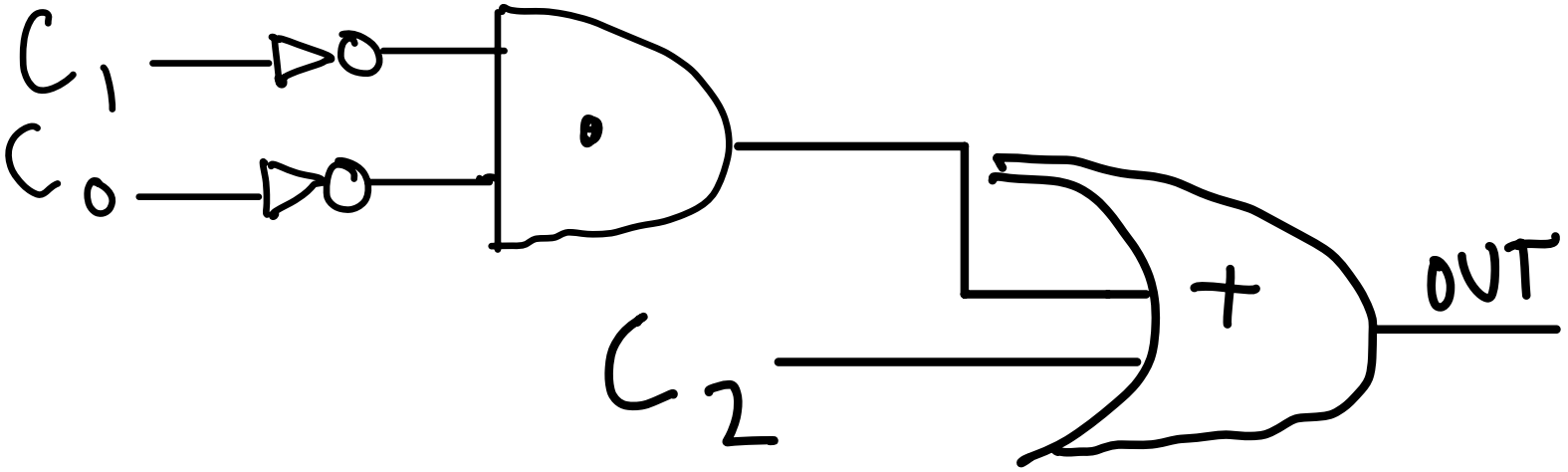
c) Light 1 Red 100 101 110 111



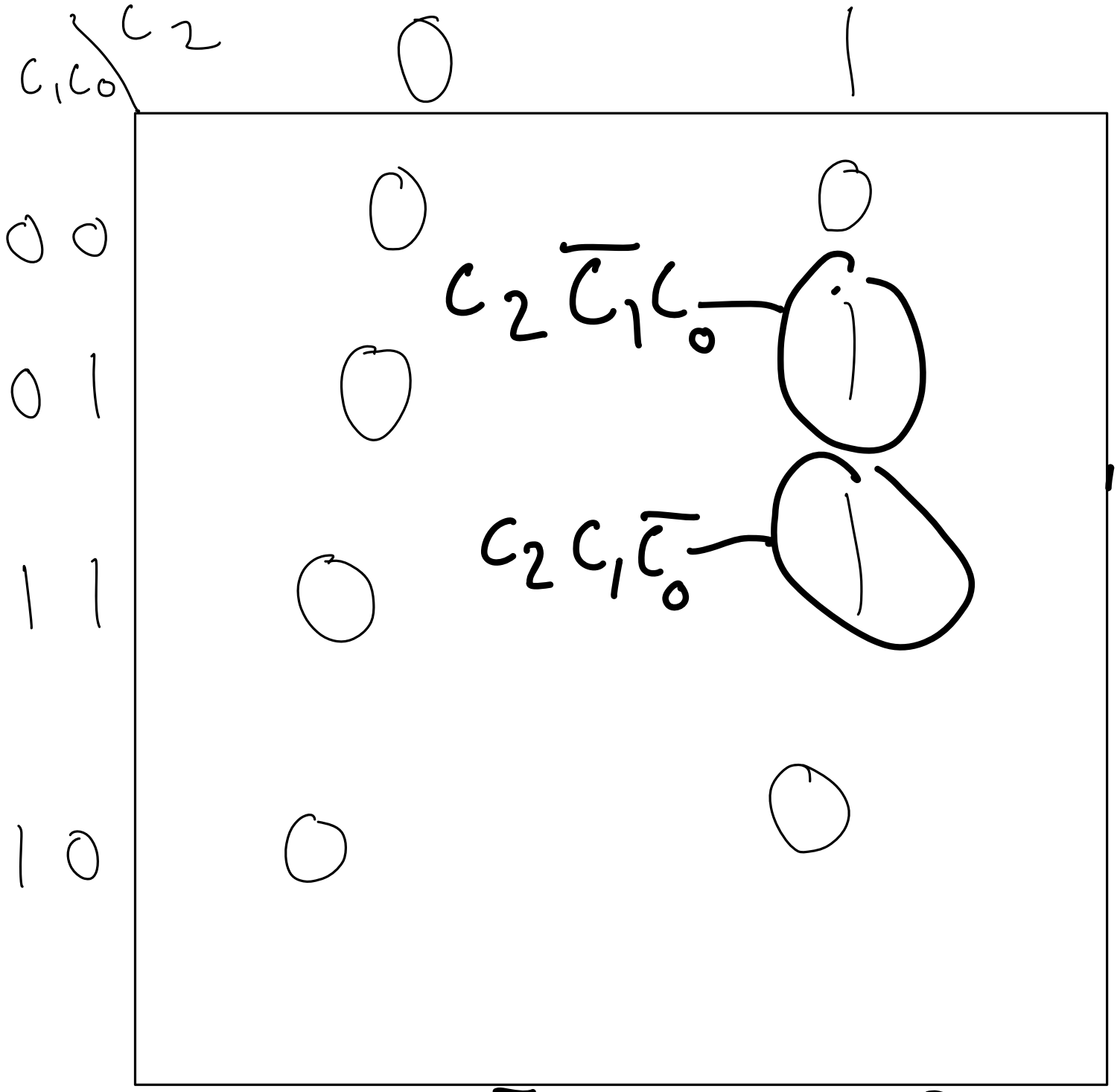
SOP: $C_2 + \bar{C}_2\bar{C}_1\bar{C}_0$

SOP: $C_2 + \bar{C}_1\bar{C}_0$

Light 1, Red



d) Light 2 Green

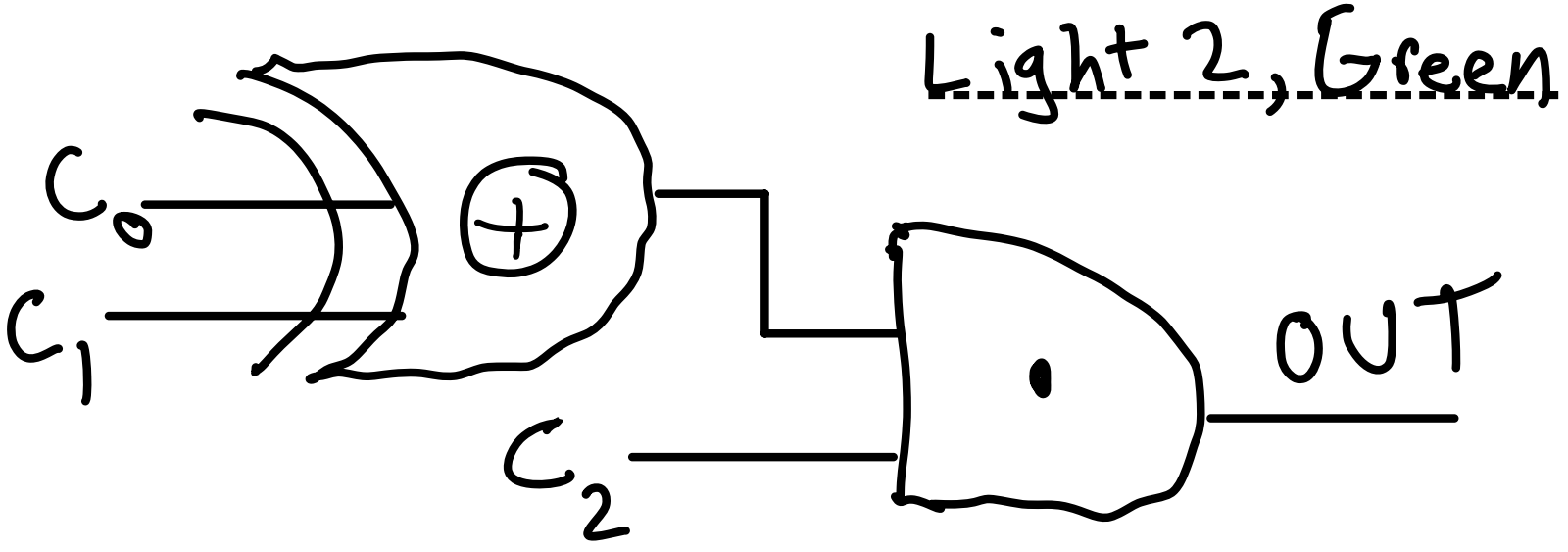


$C_2\bar{C}_1C_0 + C_2C_1\bar{C}_0$

$C_2(\bar{C}_1C_0 + C_1\bar{C}_0)$

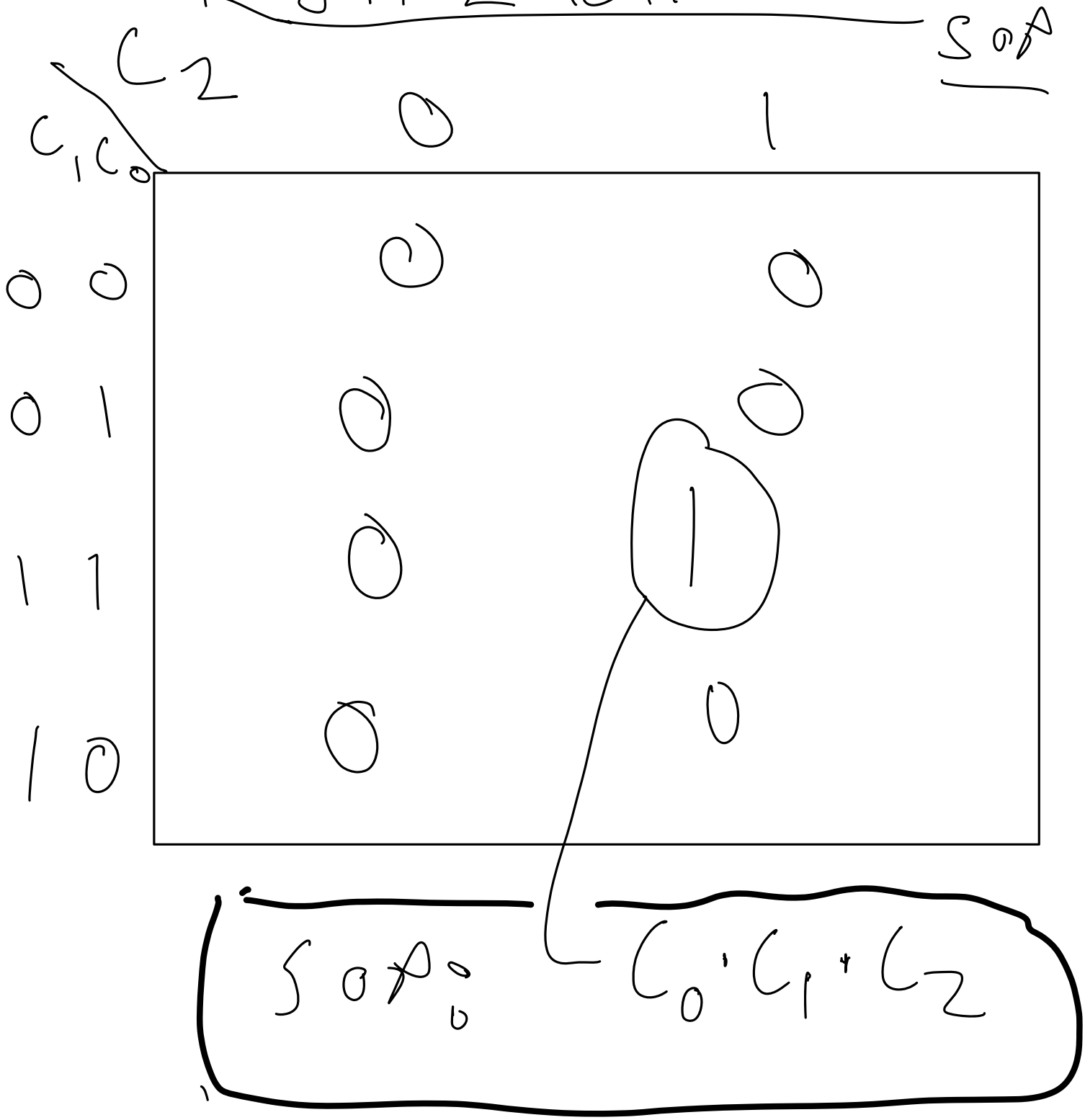
SOP: $C_2(C_0 \oplus C_1)$

Light 2, Green

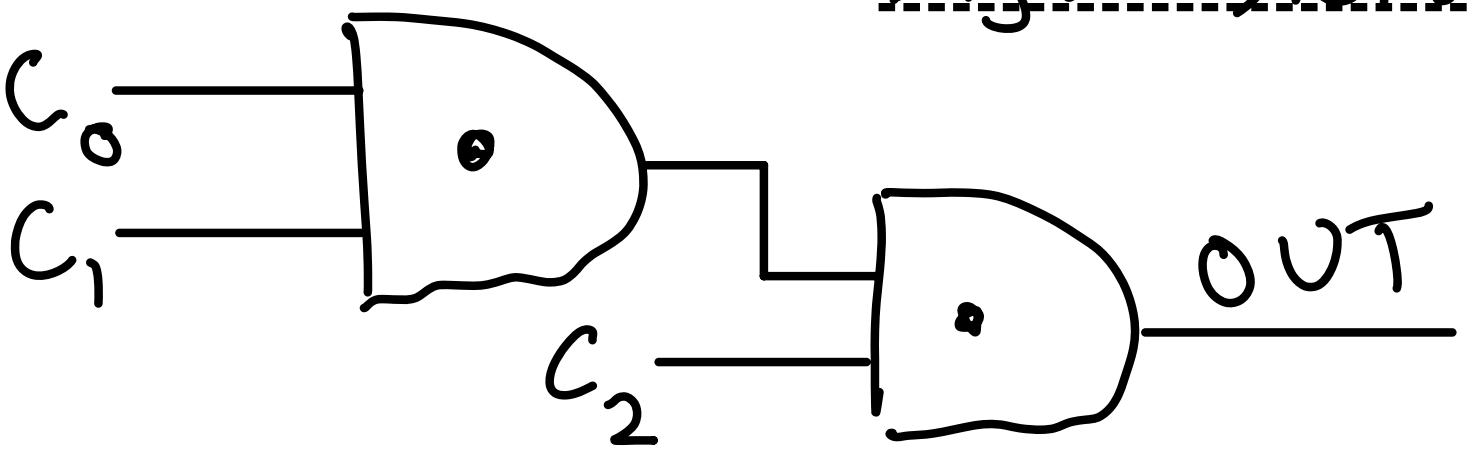


e)

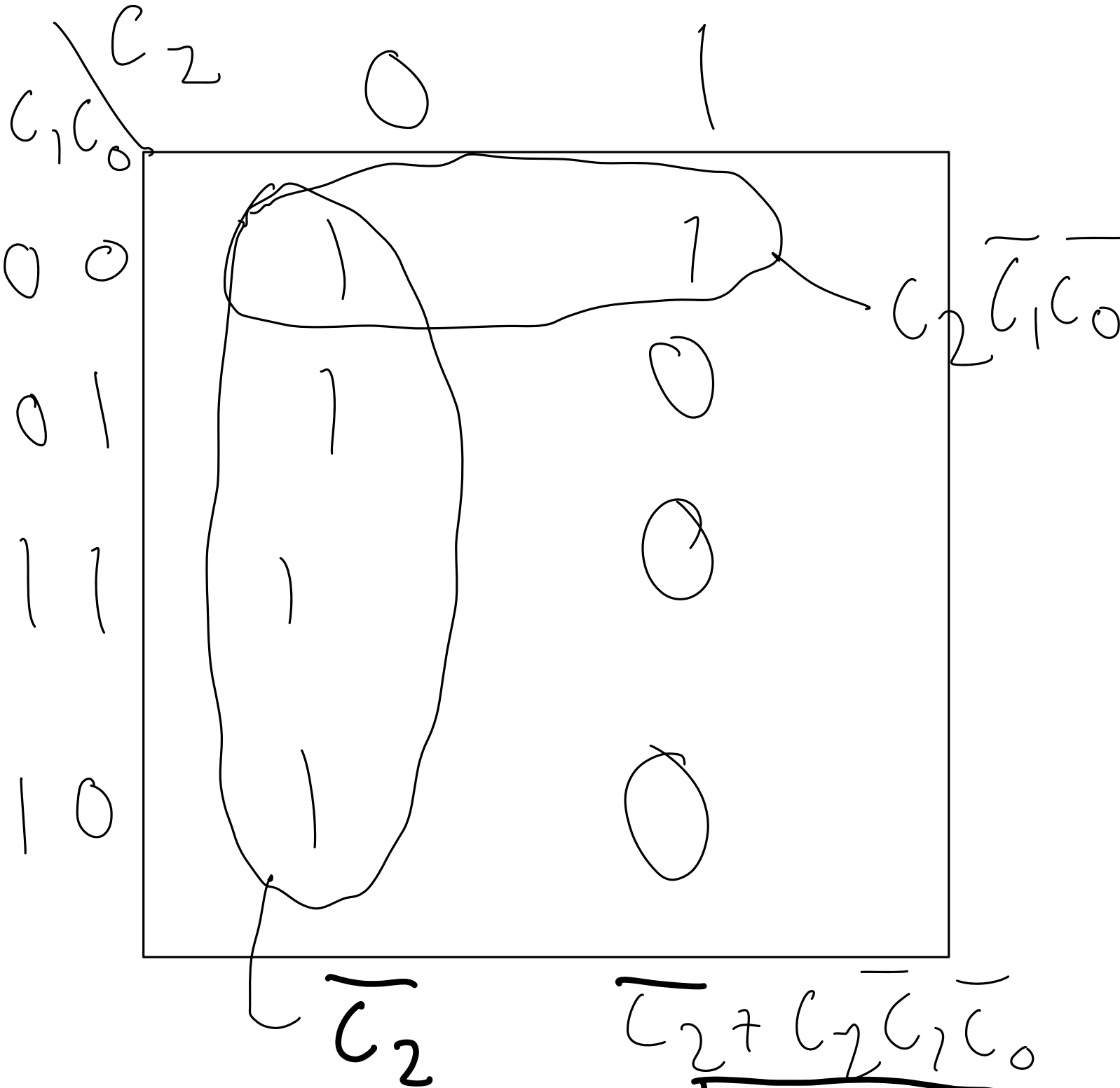
Light 2 Yellow



Light 2, Yellow



f) Light 2 Red



SOP: $= \bar{C}_2 + \bar{C}_1\bar{C}_0$

Light 2, Red