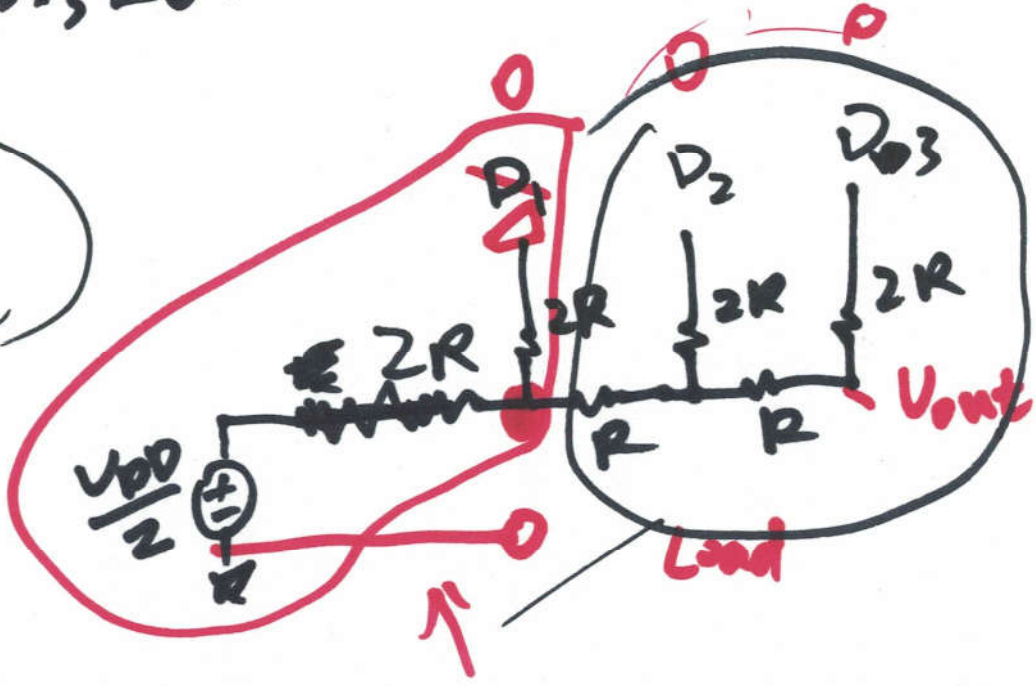
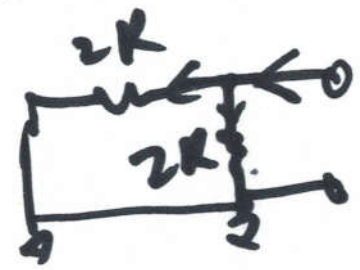
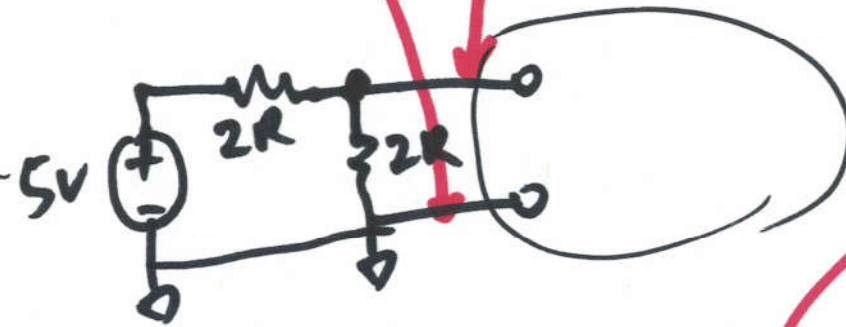


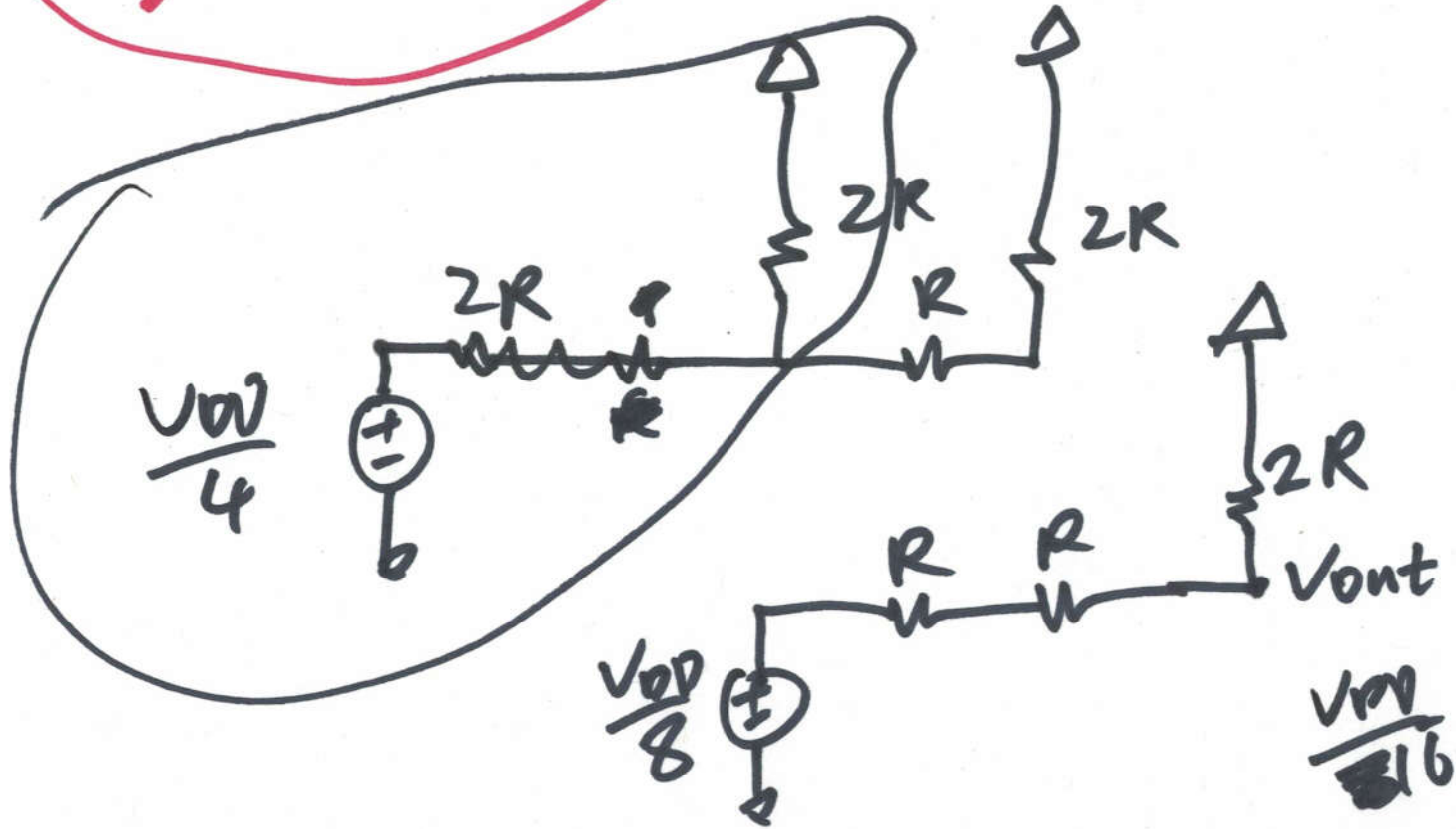
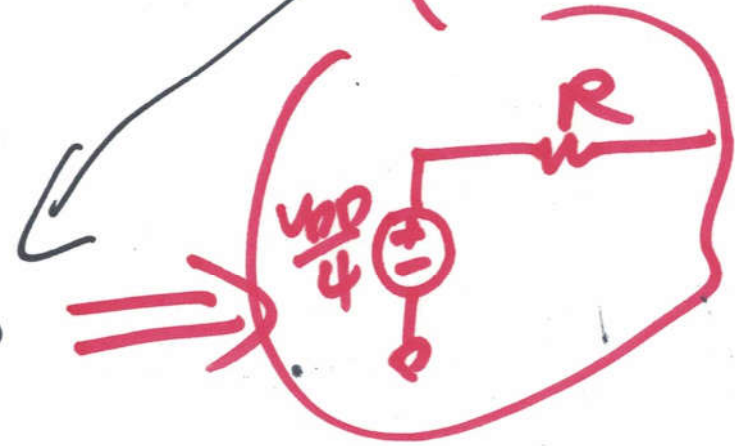
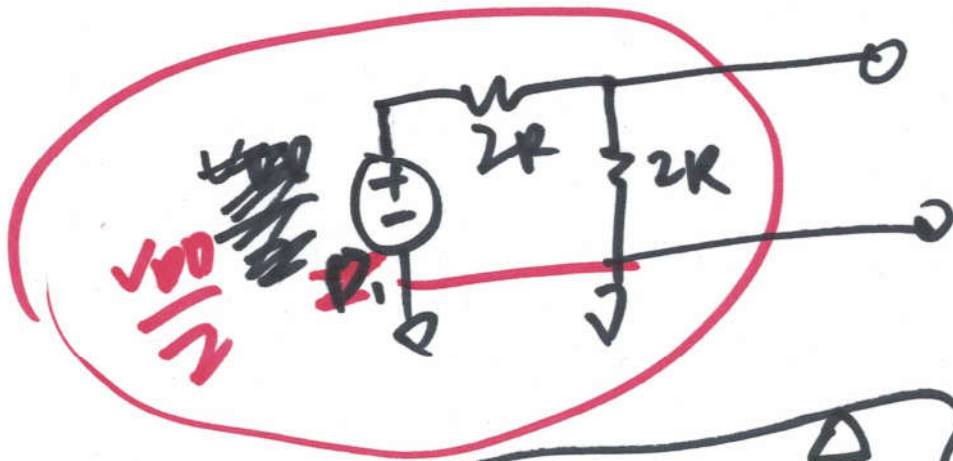
1001
 $D_{input} = 0001$
 $\frac{V_{DD}}{2^N} = \frac{V_{DD}}{16}$

① If $D_0 = V_{DD}$, $D_1 = D_2 = D_3 = 0V$

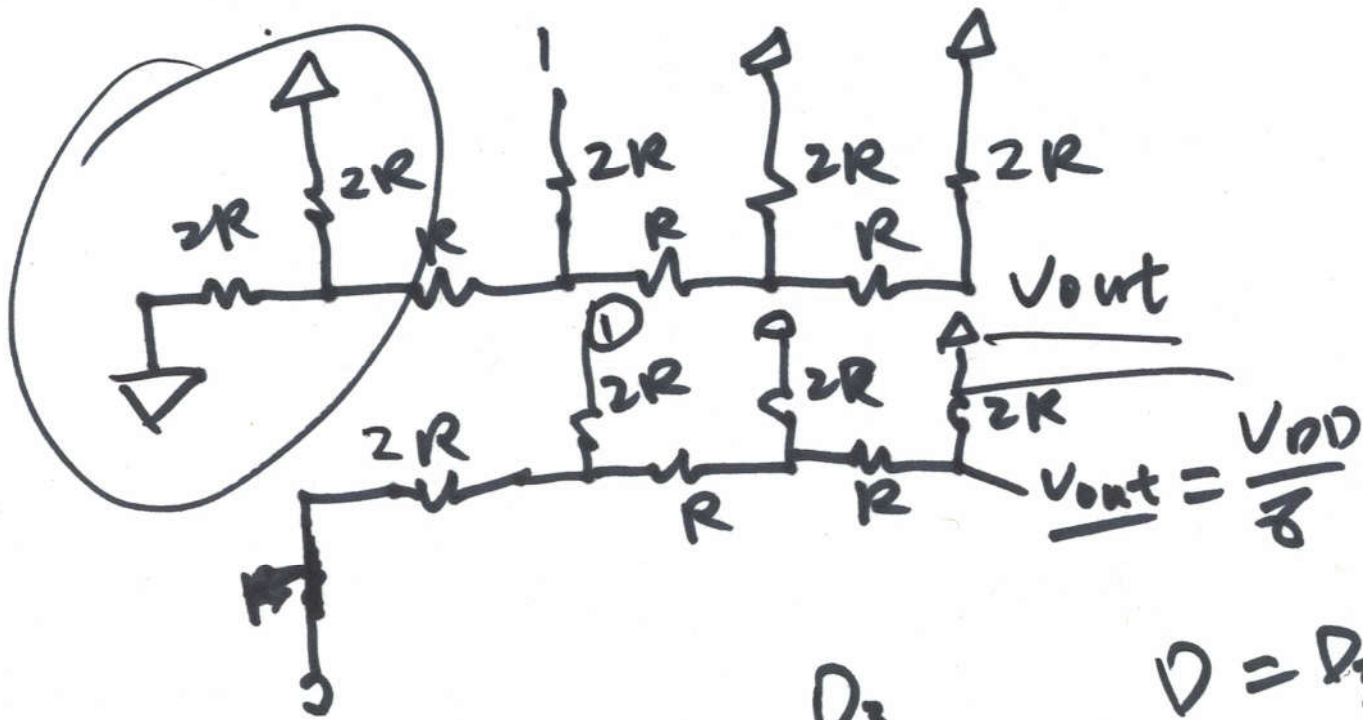


①

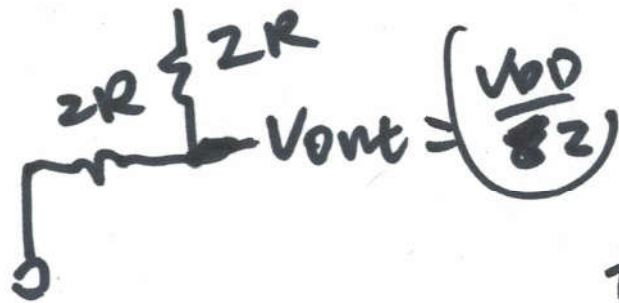
② If D_1 is ~~is~~ V_{DD}



②



$$D = D_3 D_2 D_1 D_0 = \frac{1000}{1}$$



$$\frac{\text{input word}}{2^N} = \frac{1000}{2^N}$$

$$\frac{1000}{2^N} = \frac{8}{16} \cdot 5V = 2.5V$$

3

Comparators (Op Amp)

