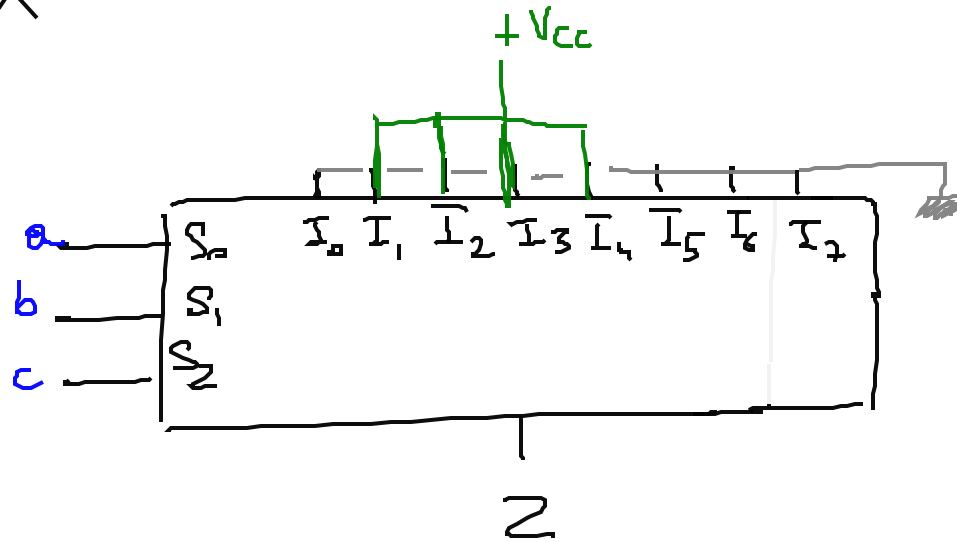


mux



$$\begin{aligned}
 101 &= 1 \times 2^0 + 0 \times 2^1 + 1 \times 2^2 \\
 &= 1 + 0 + 4 \\
 &= 5
 \end{aligned}$$

000
111

101 → 5
2² 2¹ 2⁰

$$\begin{aligned}
 F &= \underset{c}{0} \underset{b}{0} \underset{a}{1} + \underset{c}{0} \underset{b}{1} \underset{a}{0} + \underset{c}{0} \underset{b}{1} \underset{a}{1} + \underset{c}{1} \underset{b}{0} \underset{a}{0} \\
 &\quad \downarrow \quad \quad \downarrow \quad \quad \downarrow \quad \quad \downarrow \\
 &\quad I_1 \quad \quad I_2 \quad \quad I_3 \quad \quad I_4
 \end{aligned}$$