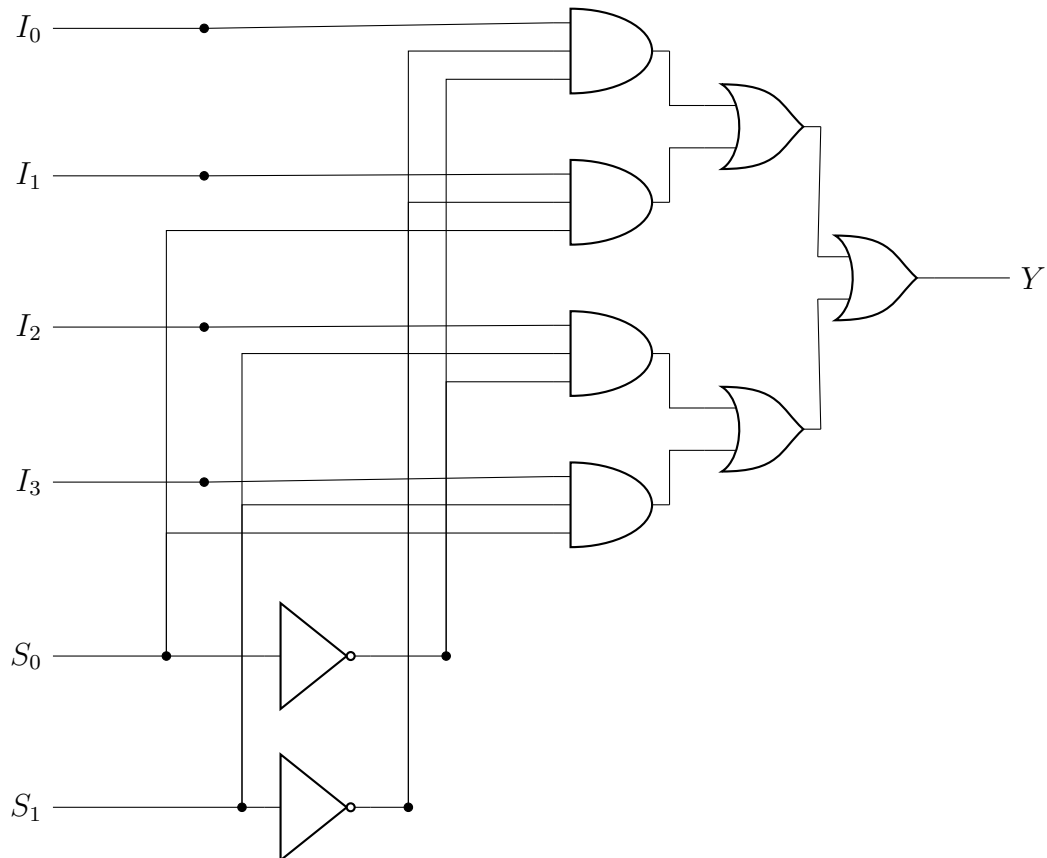# 4-to-1 Multiplexer (4:1 MUX)

Circuit

$$Y = I_0\overline{S_1}\,\overline{S_0} + I_1\overline{S_1}S_0 + I_2 S_1\overline{S_0} + I_3 S_1 S_0$$

Truth Table

S_1	S_0	Y
0	0	I_0
0	1	I_1
1	0	I_2
1	1	I_3