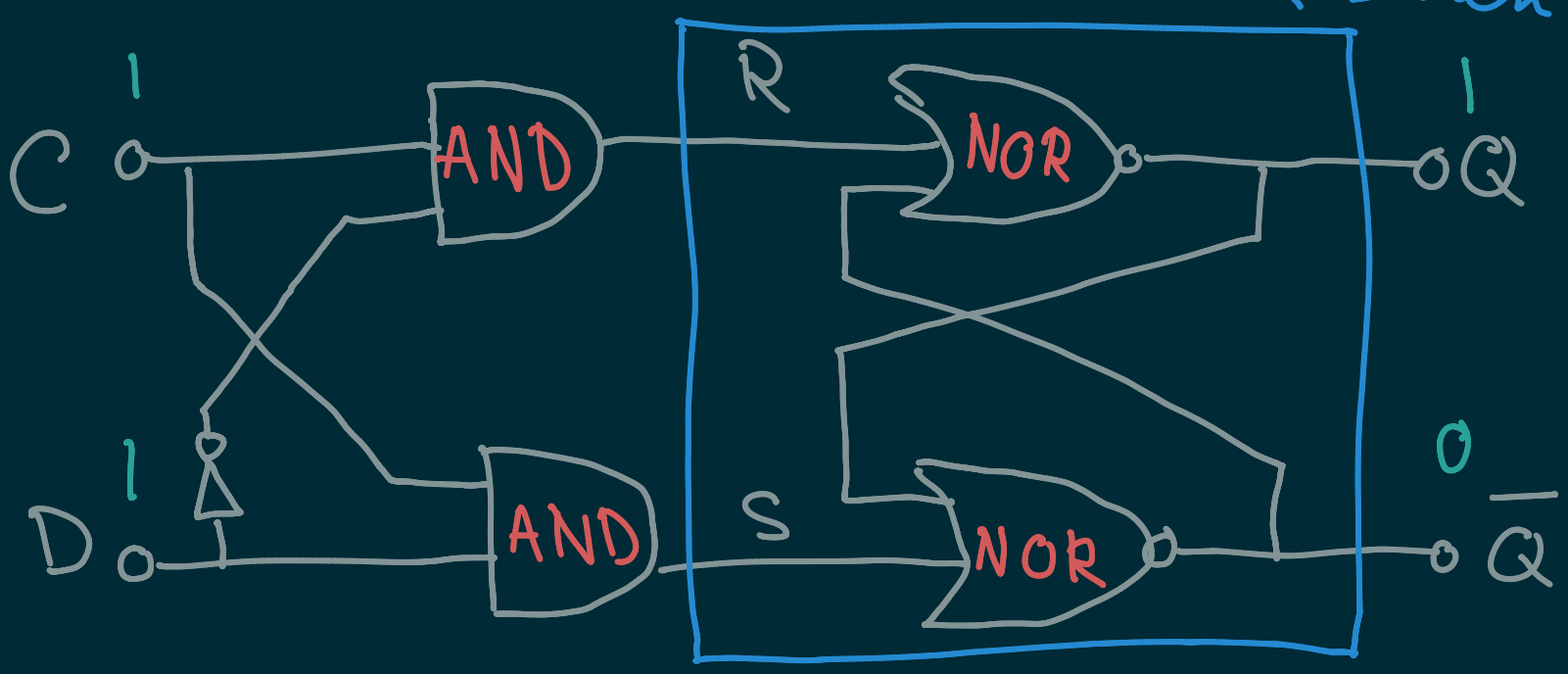
Set Reset Latch

S	R	Output
0	0	No change
1	0	Q = 1
0	1	Q = 0
1	1	Not allowed

Data Latch

SR Latch



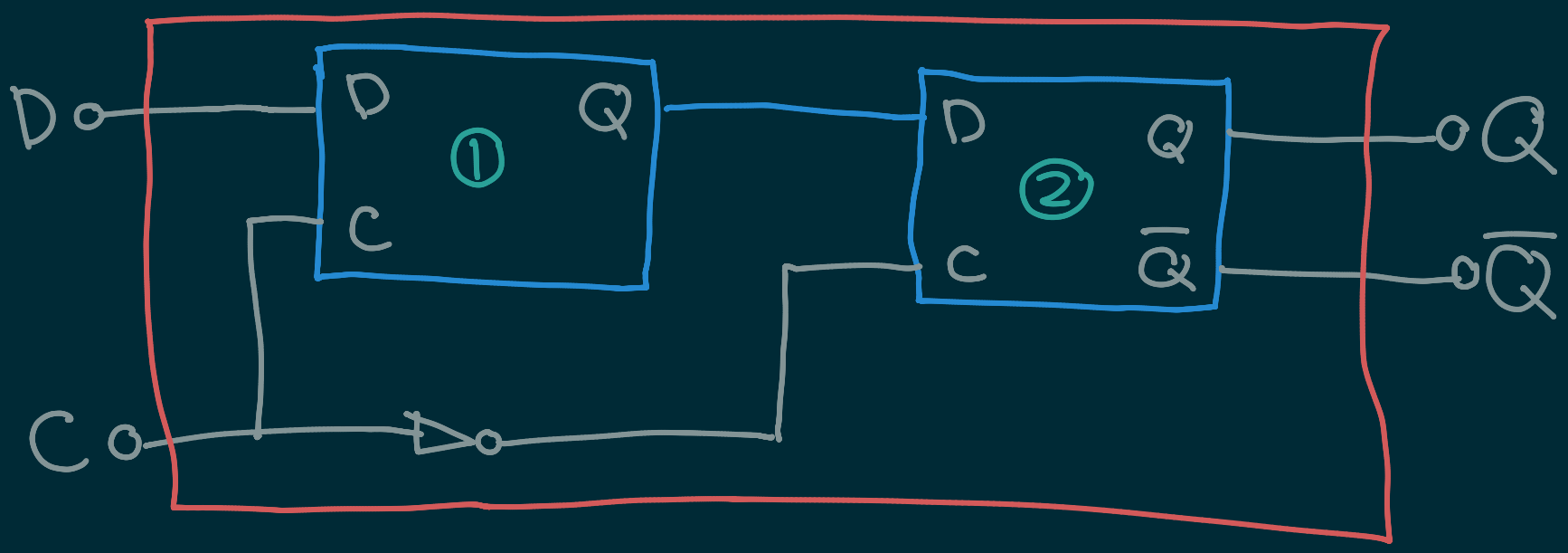
Impossible for R and S to both be 1

C	D	Outcome
0	Any	Hold
1	1	Q = 1
1	0	Q = 0

When C is 1, Q has same value as D

D flip flop

2 D Latch



C	Outcome
1	Write D to ①
0	Write ① to ②

Multiplexer

Given n signals, need $\log_2 n$ selector input

3 - 8 Decoder: