

$$2 \cdot \frac{5}{8} = \frac{10}{8} = 1$$

$$2/e \rightarrow 0 \times 5 \rightarrow 0$$

$$0x400000000 \times 5 \rightarrow$$

$$1 \quad \overbrace{10100}^{\quad} \\ \underbrace{\quad\quad\quad}_4$$

$$0x460000000$$

x 010110

???

???

↓

1

000000

↓

0

last bit 1: $(x \& 1) | 1$

next-to-last bit 1: $((x \gg 1) \& 1) | 1$

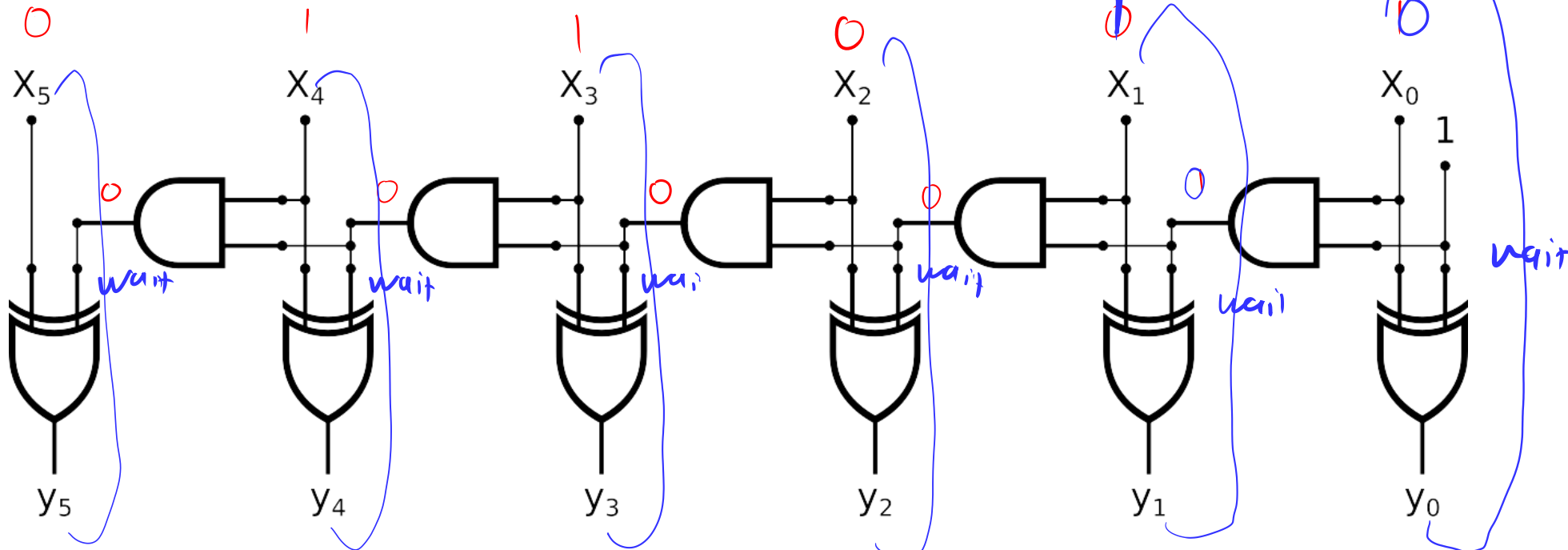
abcdef

↓

$(x) | (x \gg 3)$

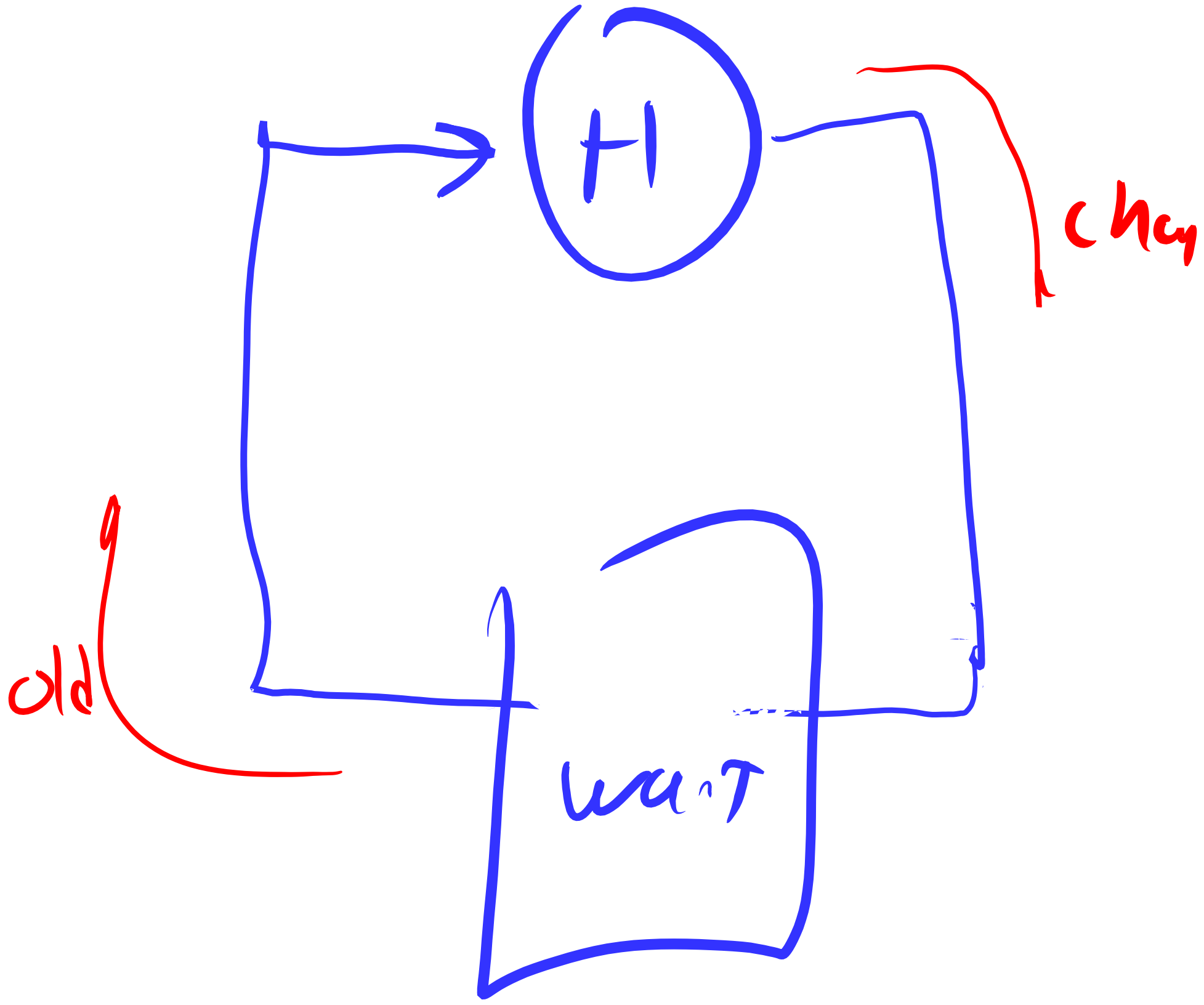
abc d|a
ble c|f

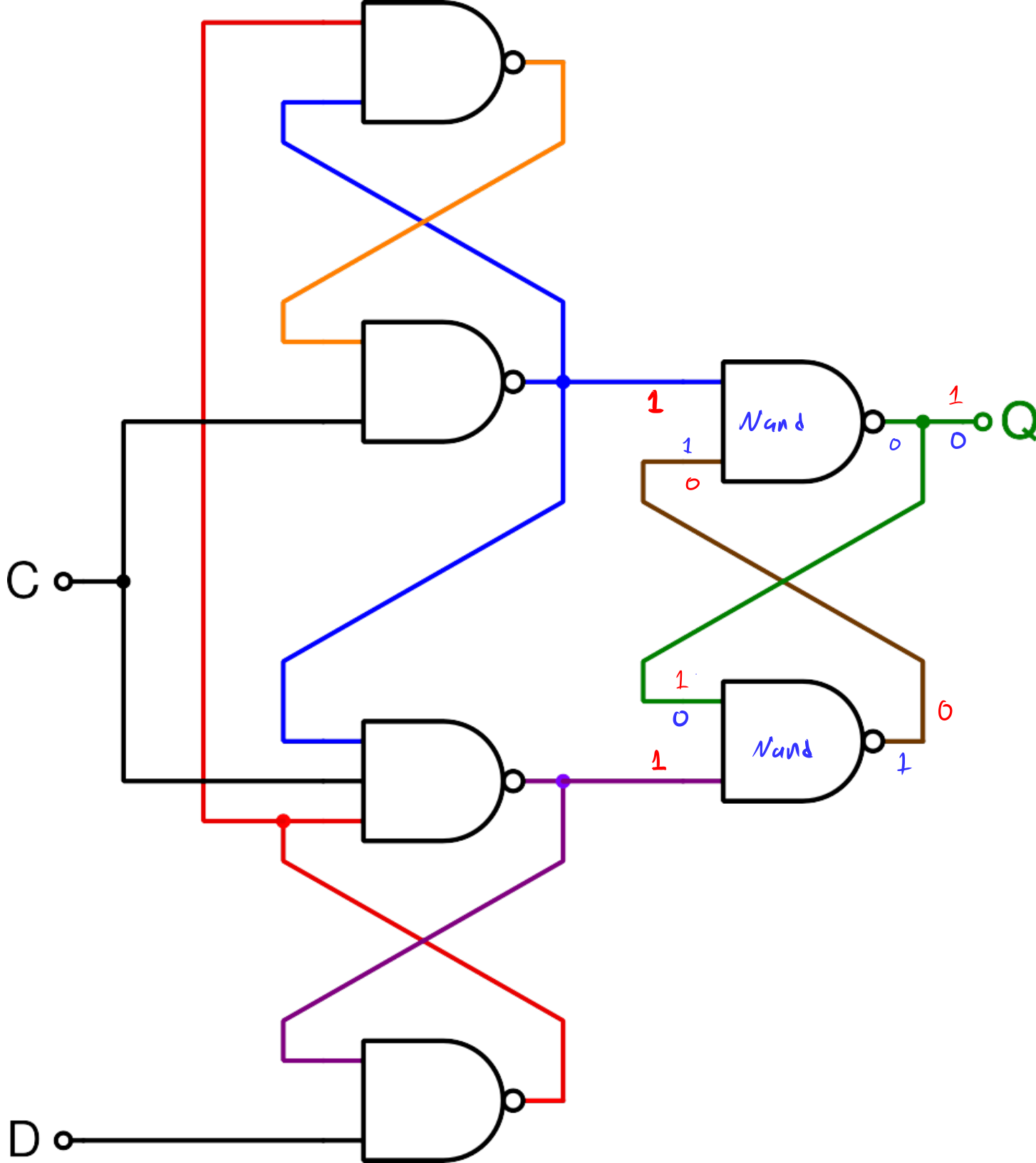
25



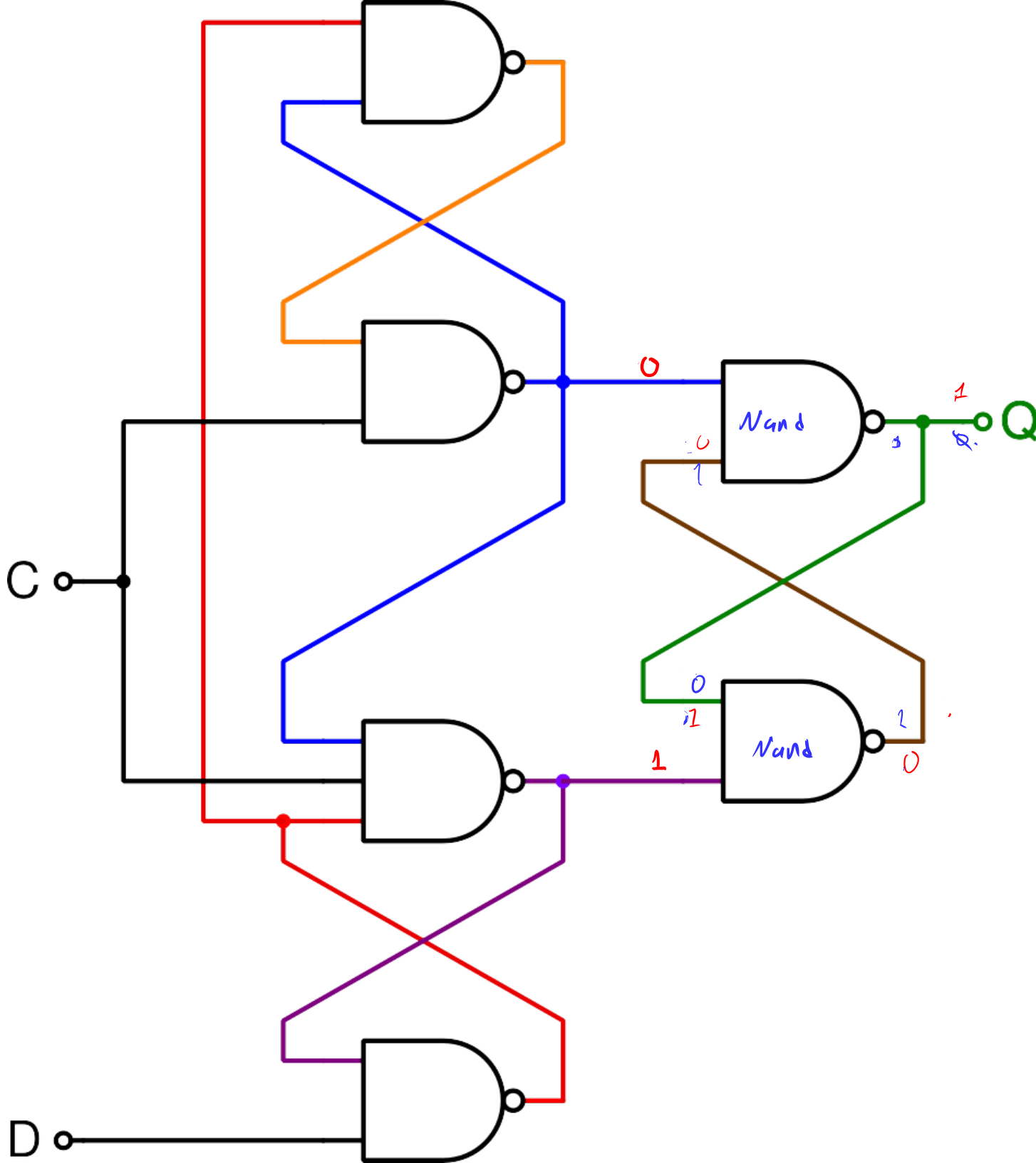
26







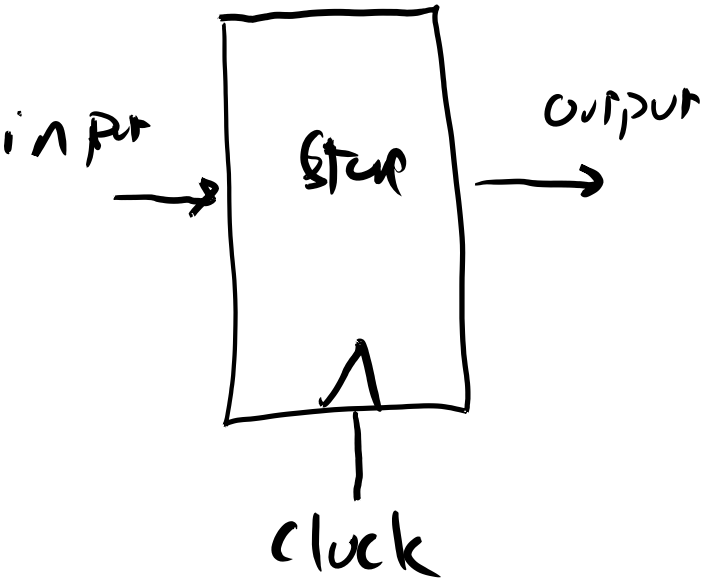
1, 1 → Memory



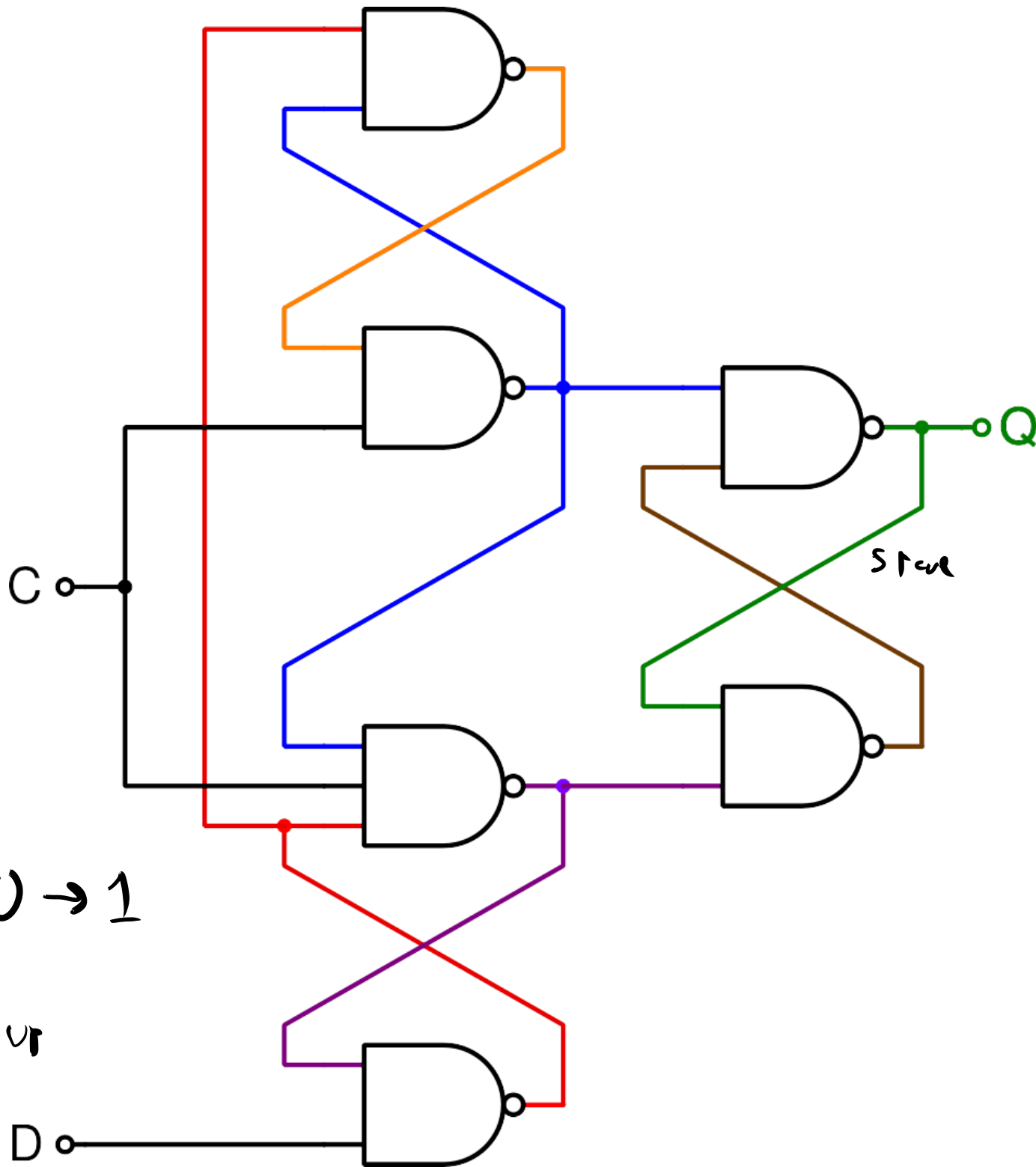
1, 1 → Memory
 0, 1 → 1

Rising-edge

register

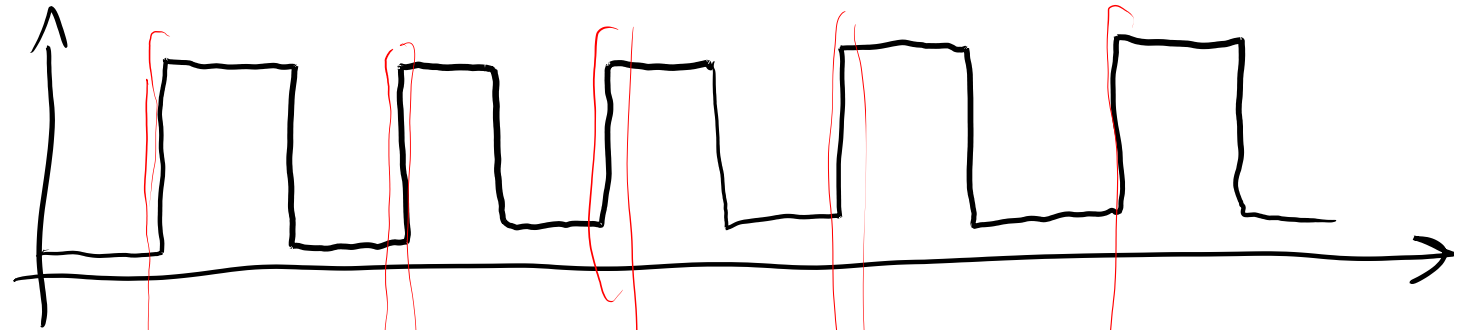


Output unchanged
except when
clock goes from 0 → 1
in that moment
output becomes input



voltage

clock



time

input



output

