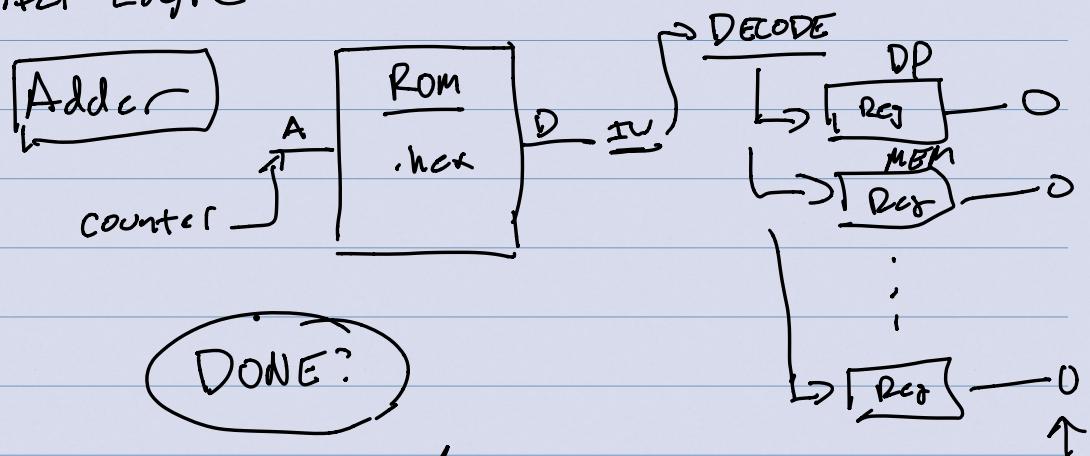


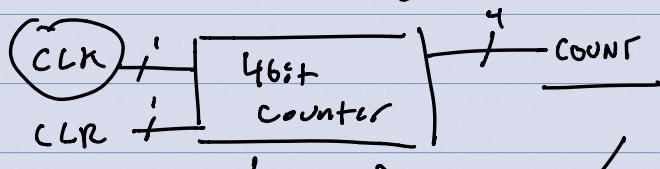
ProjectOS - Goal: instruction counts
instruction type counts

Digital Logic



DONE?

4 bit Counter

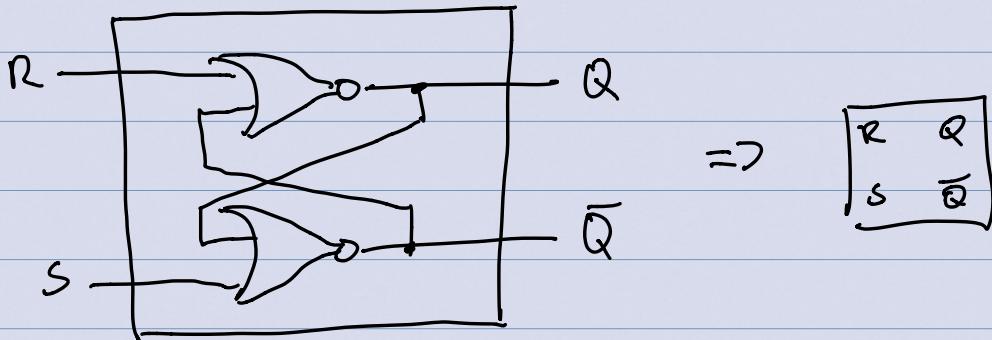


1 bit register ←

SR Latch → D Latch → D flip-flop
1 bit register

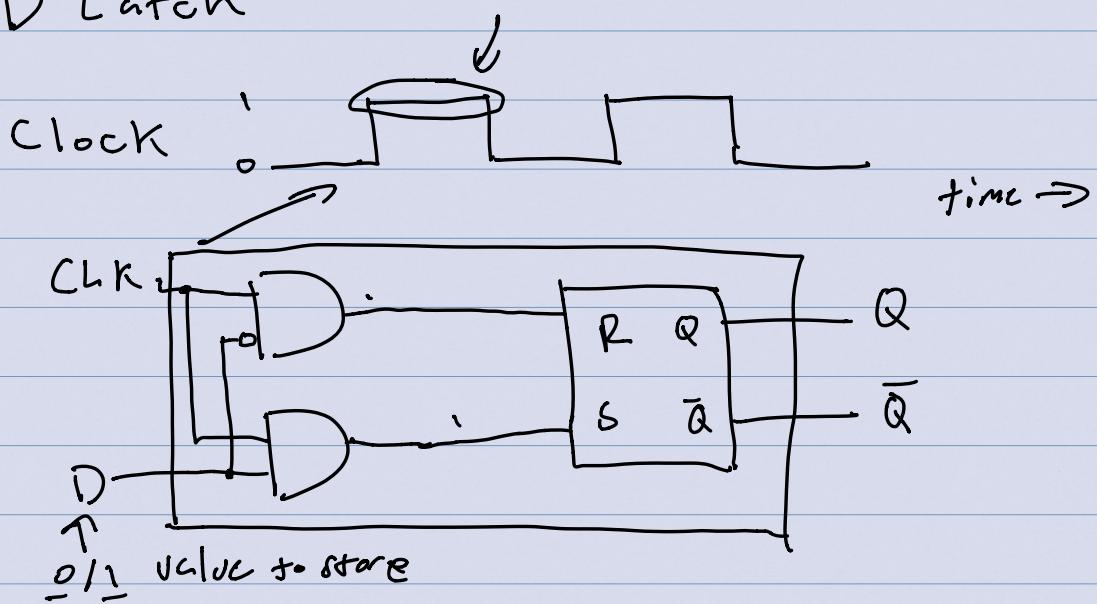
Add support for CLR (clear)

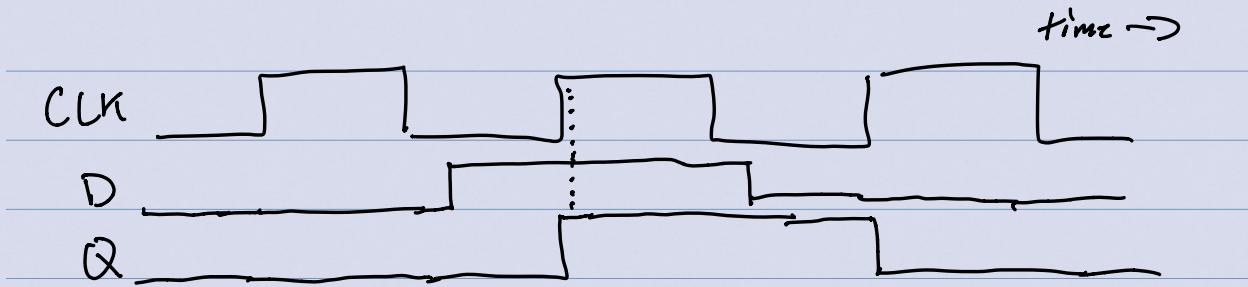
SR Latch Set/Reset



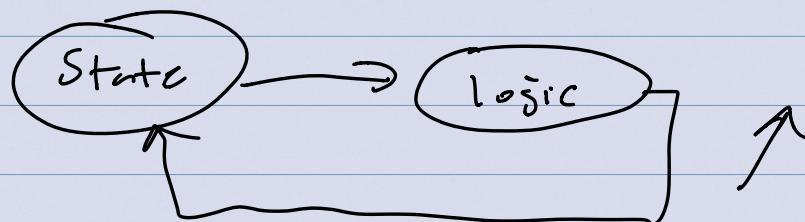
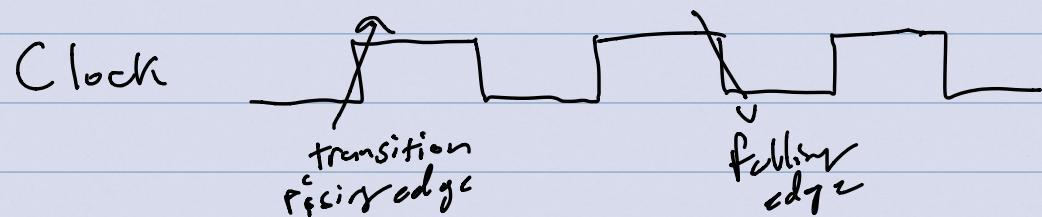
R	S	Q	\bar{Q}
0	0	0	1
0	1	1	0
1	0	1	0
1	1	X?	X?

D Latch

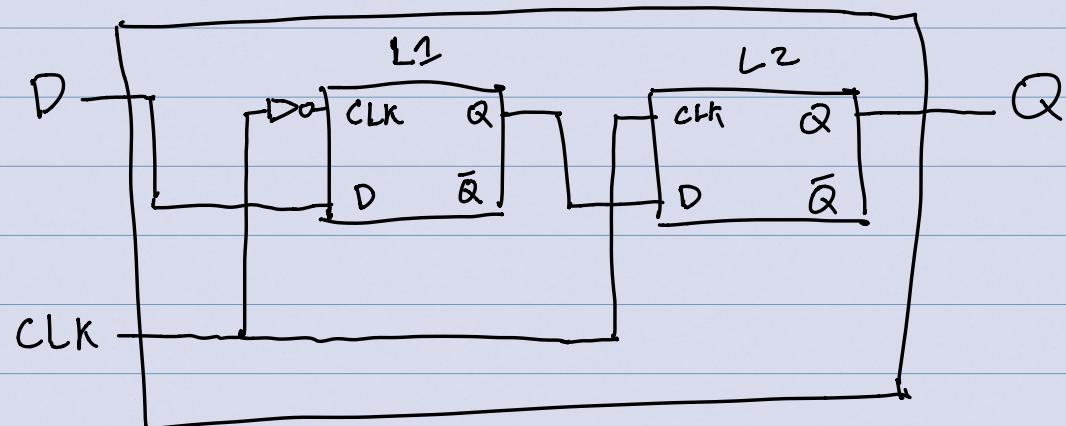




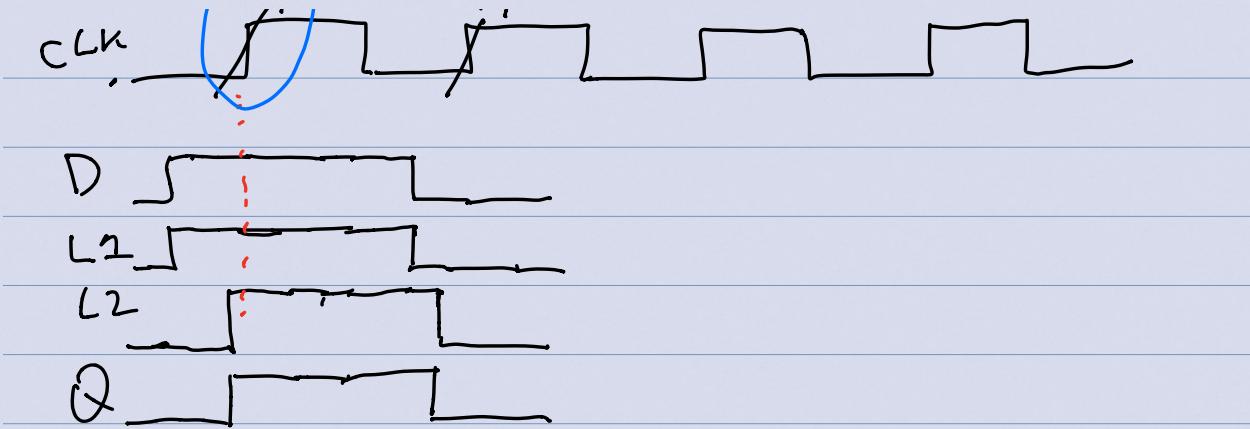
D Flip-flop



D flip flop : two D Latches

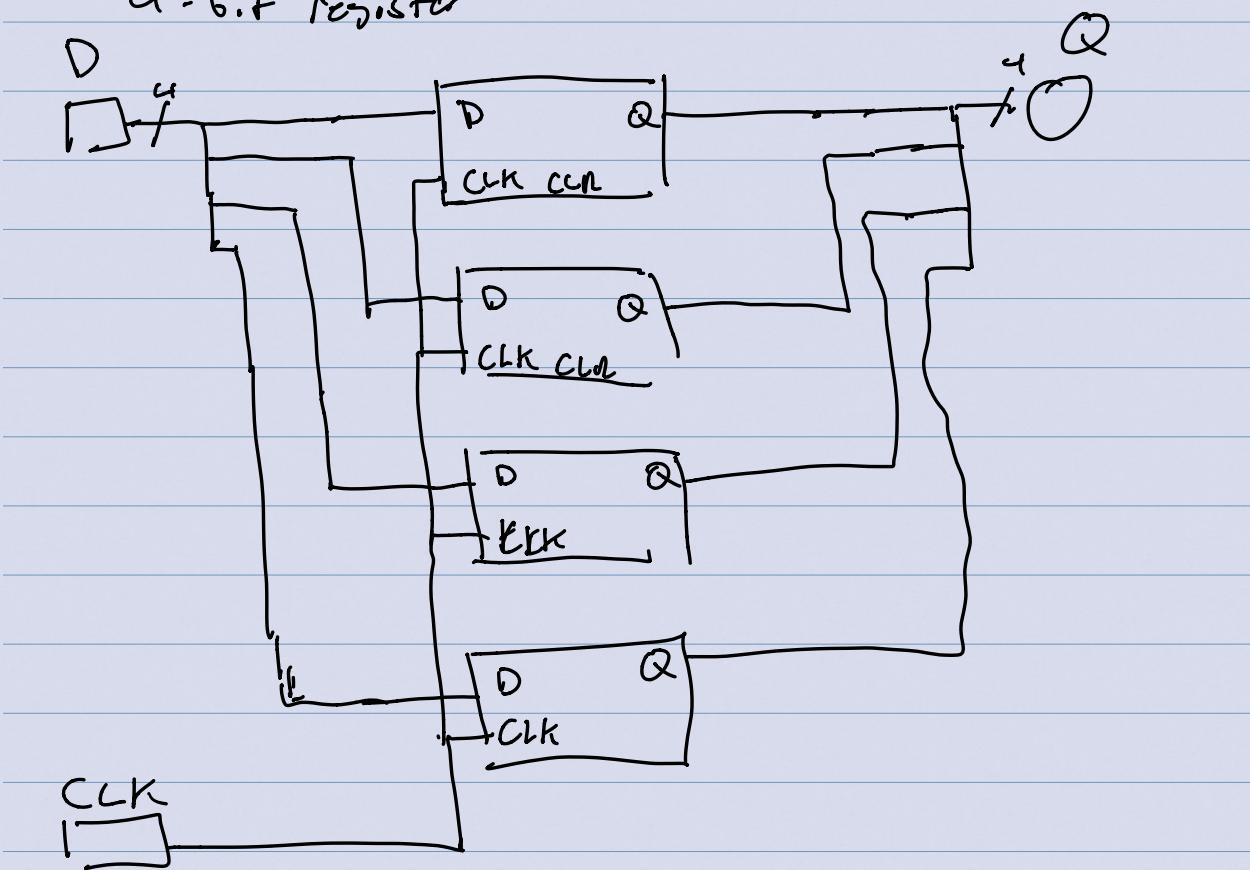


↑

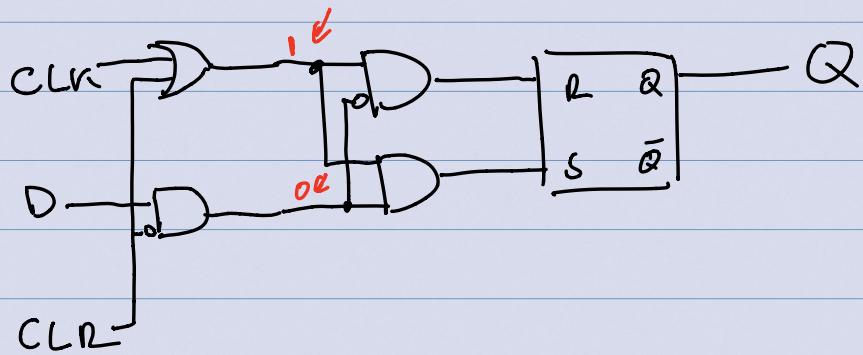


A D flip-flop is a 1-bit register

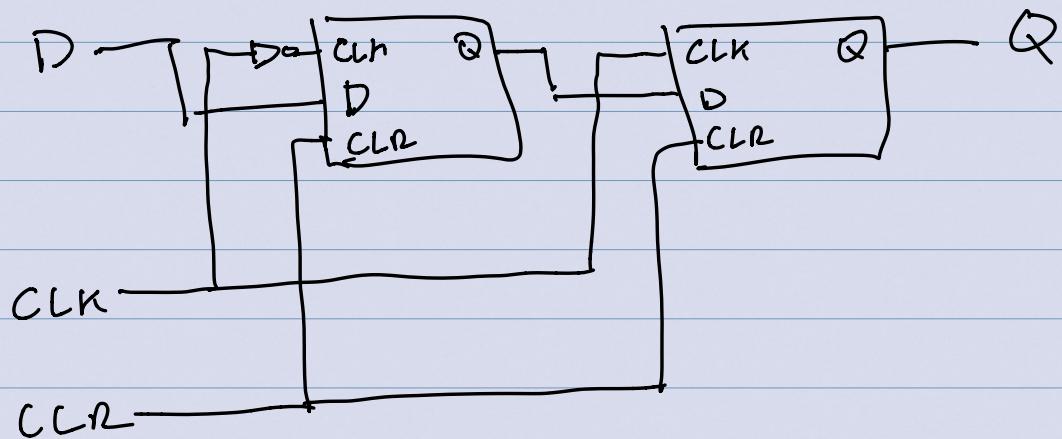
4-bit register



D Latch with CLR



D Flip-flop with CLR



Projectors Components

