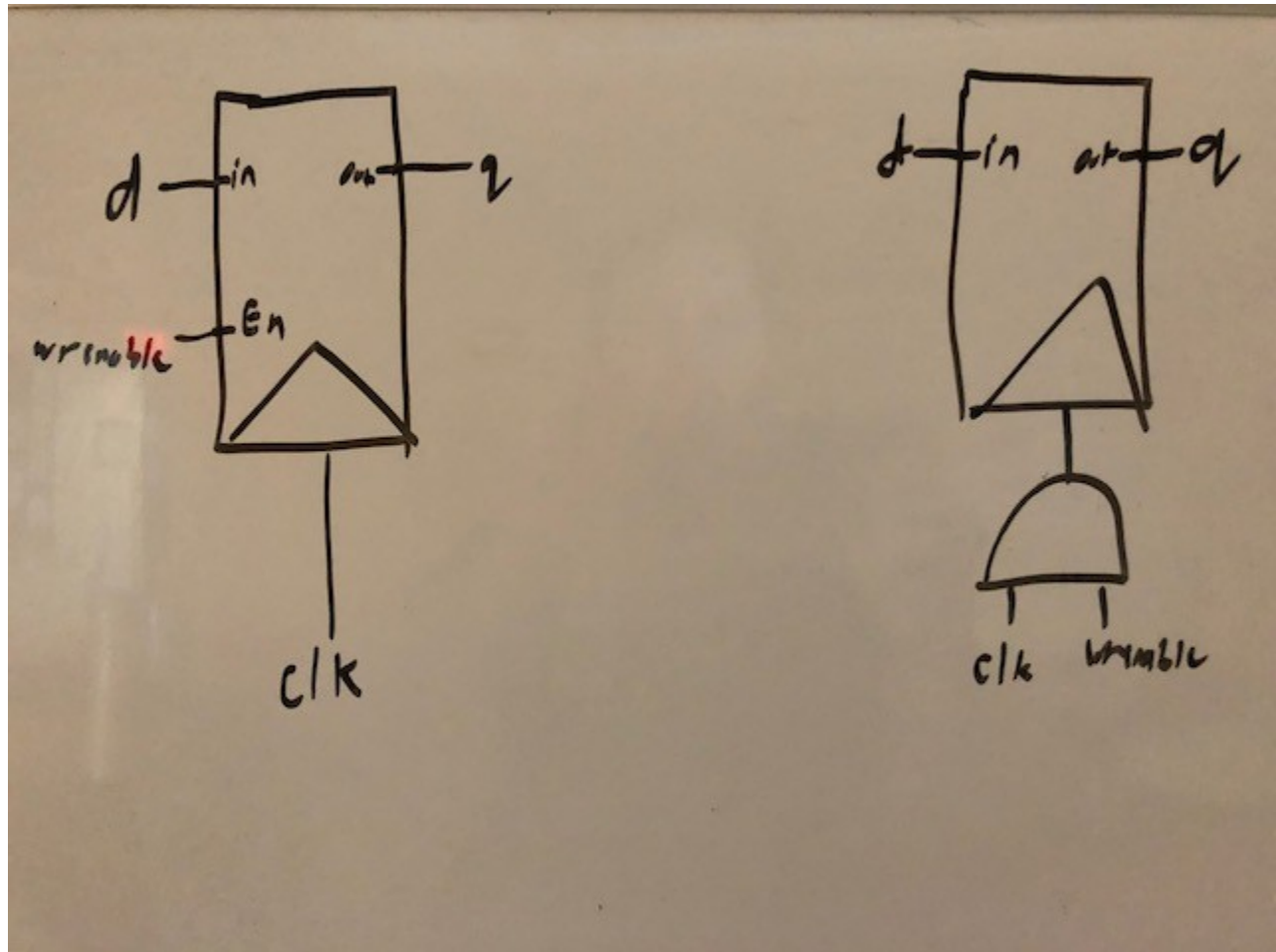Deliverable 1:



Deliverable 6:
This works by shifting the enable bit over a number of places equal to address
For example, if address is 2 and enable is 1, you shift 1 over two bits:
0001 -> 0100
And now your output is high on bit 2.
If address is 0, the enable bit doesn't move and you have the output on bit 0.
If enable is 0, it doesn't matter how far it's shifted, all of the result bits are 0.


All of my registers are in register32.v, my mux is in mux32.v, and all of my decoders are in decoder.v.
The registers and decoders have corresponding test benches, though I didn't test the decoder because
we were told it worked (and it did when integrated with everything else).