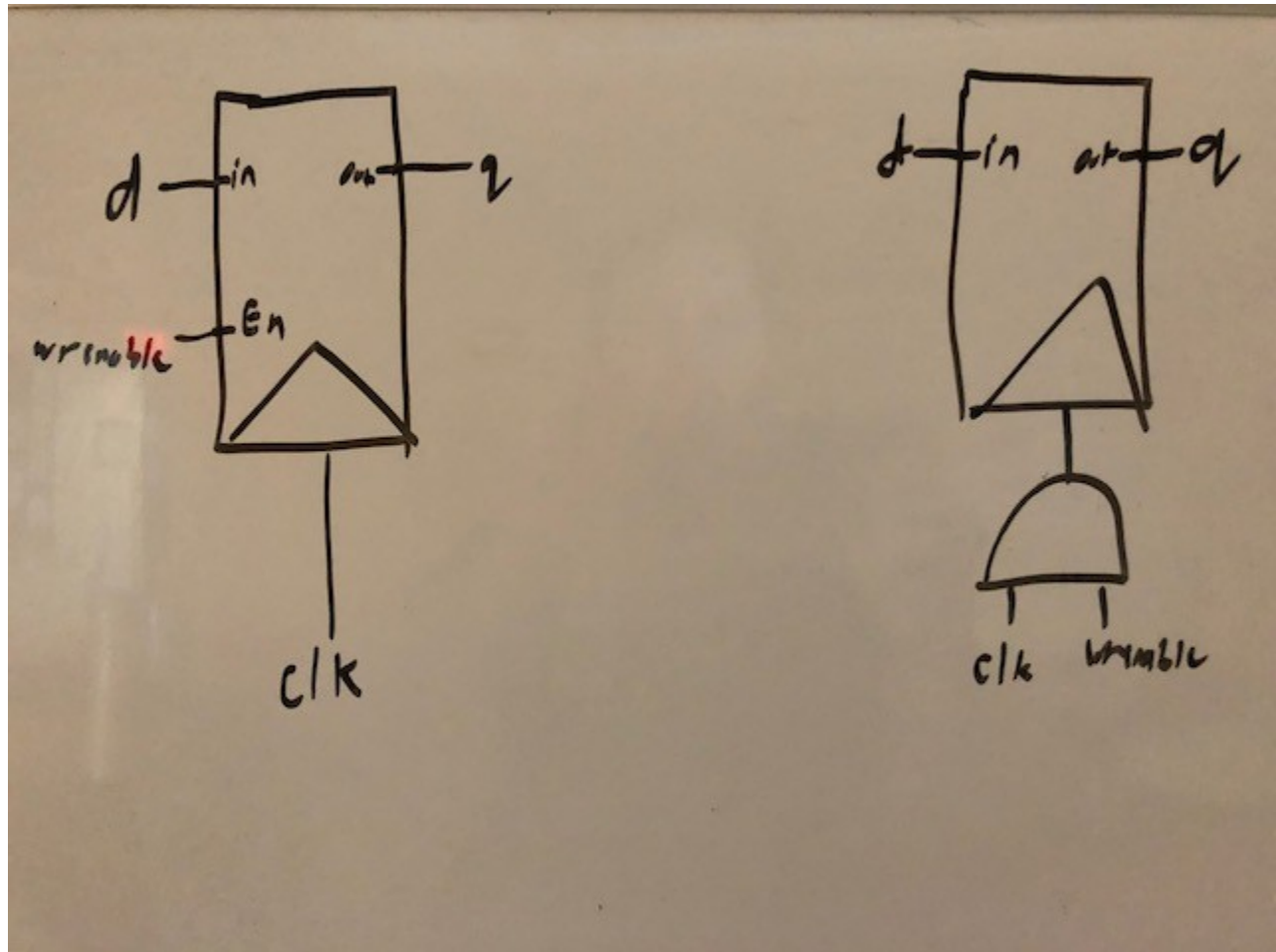


Deliverable 1:



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 mux because I didn't want to have to type out all of the connections again and figured I'd keep it in mind when I put everything together (and it worked just fine).