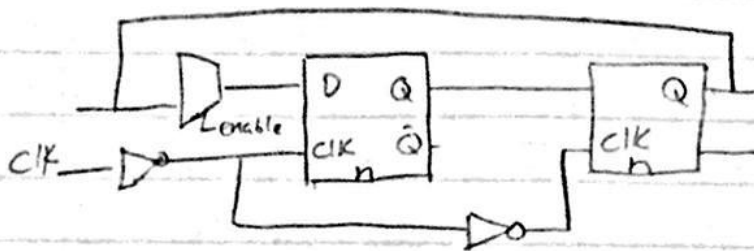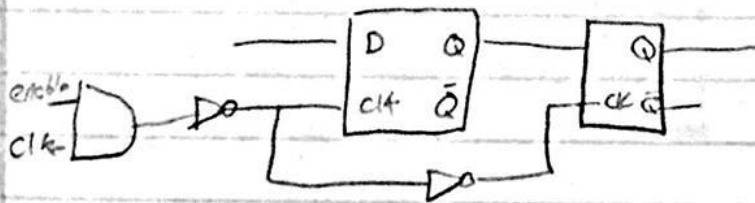# Deliverable 7:

Positive edge Triggered & enable

Gating the clock, pos edge trigged

Deliverable 6:

The output is 32 bits long. The enable is a single bit long, and the address is a 5 bit binary address.

The above module shifts the "enable" bit to the decimal of the binary address and pad the remaining 32-1 bits with zeros. This outputs a 32 bit output where the enable is at the bit index of the "decoded" address. The "<<" operator shifts the variable to the left of it by the number of times as specified by the variable on the right hand side.