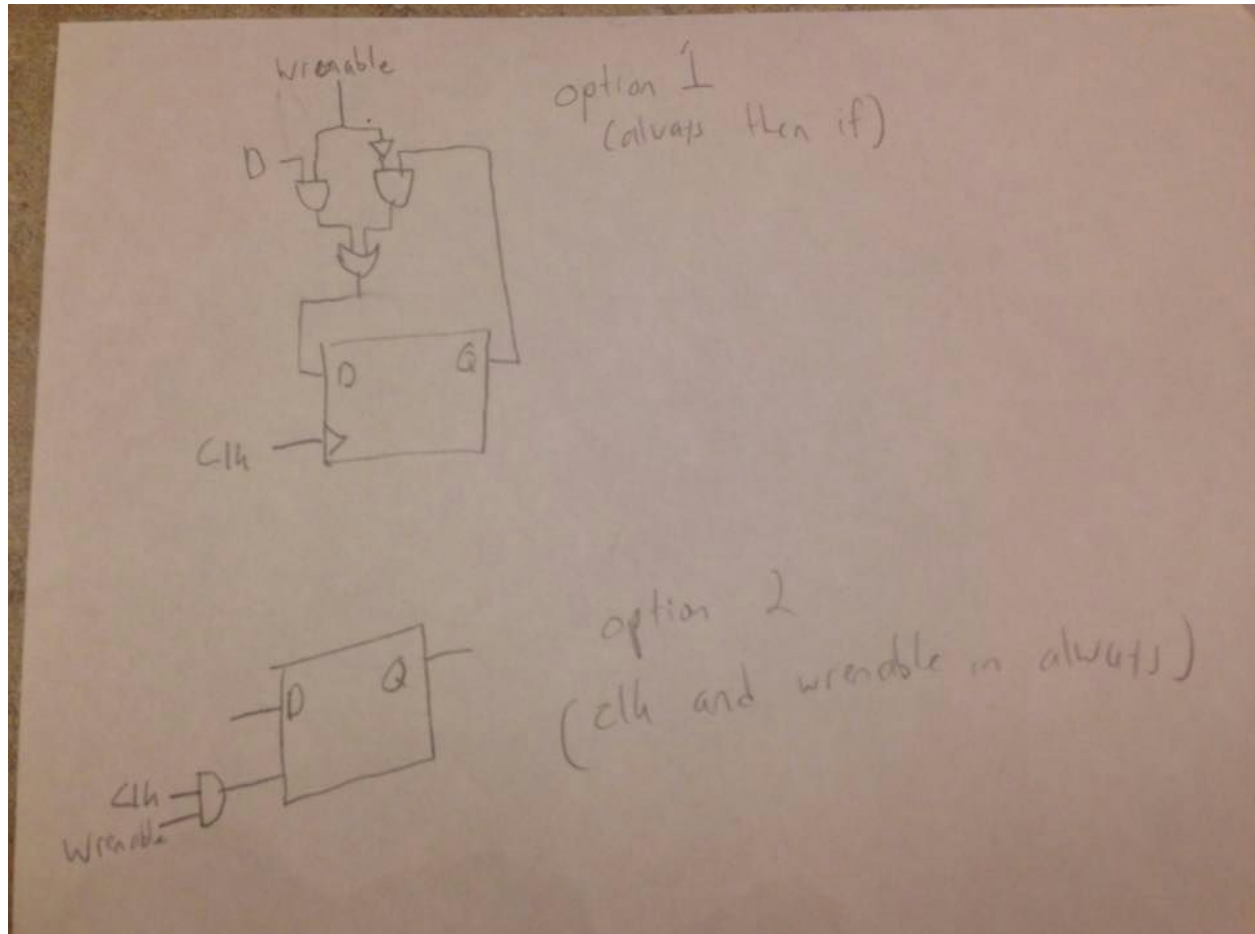


Deliverable 1



Deliverable 6

The behavior we're looking for here is:

1. If enable=1, out should be 0 for all bits except the nth bit where n is defined by the address.
2. If enable = 0, out should be 0 for all bits.

The code uses \ll , which is a left bit shift. For example, $X \ll Y$ is shifting the value of X Y bits to the left and setting all undefined bits as 0. So, if enable is 0, then the bit shift will simply put that 0 at the nth bit and fill in the rest of the 31 bits with 0 (since out has 32 bits), resulting in the out we want. If enable is 1, the 1 is shifted to the nth bit, and the rest of out is filled in with 0s.