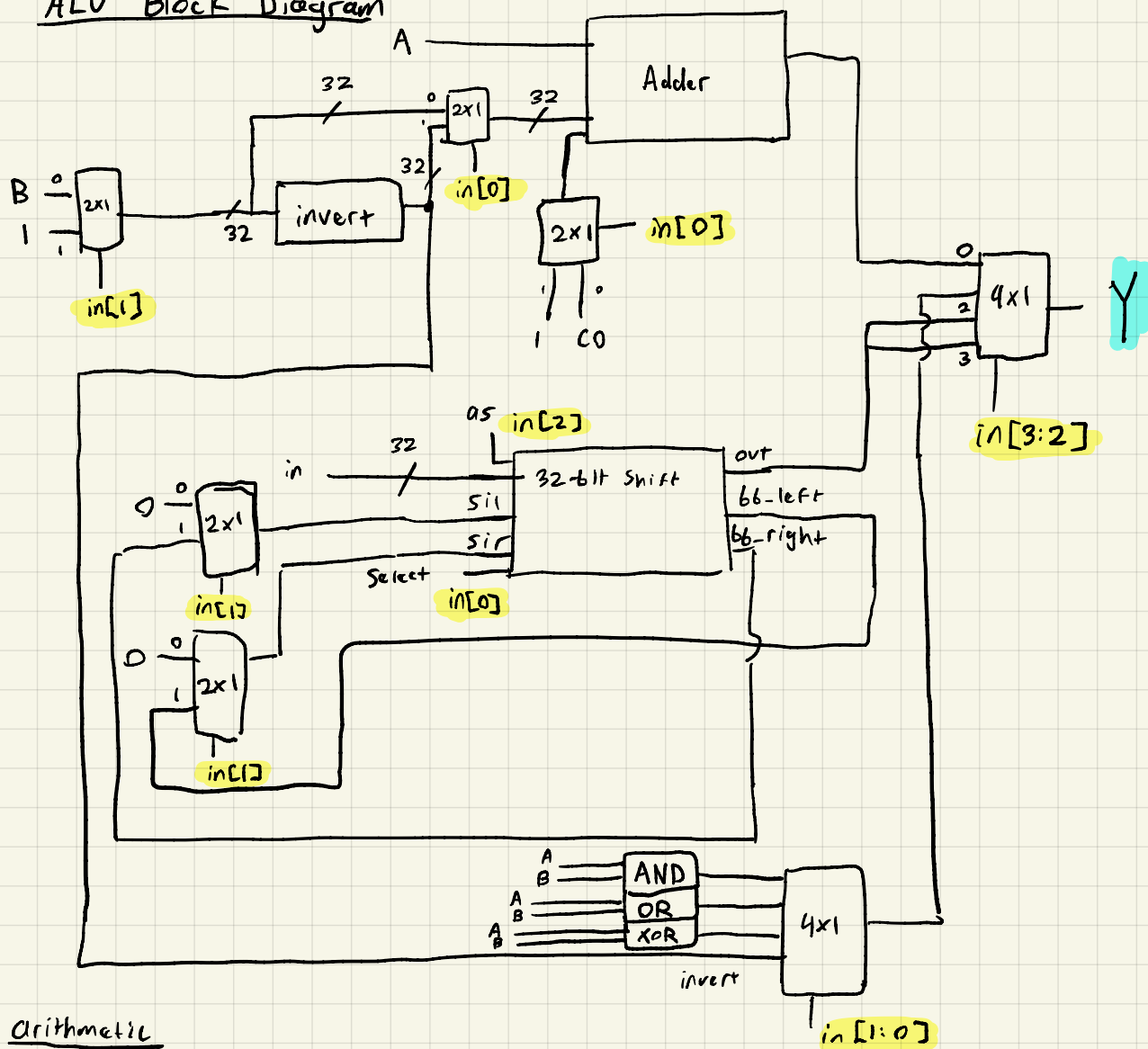


ALU Block Diagram



Arithmetic

0 0 0 0 - add with carry
0 0 0 1 - subtract
0 0 1 0 - increment
0 0 1 1 - decrement

0 1 0 0 bitwise AND
0 1 0 1 bitwise OR
0 1 1 0 bitwise XOR
0 1 1 1 one's comp

1 0 0 0 - Shift left
1 0 0 1 - Shift right
1 0 1 0 - rotate left
1 0 1 1 - rotate right

1 1 0 0 - arithmetic shift left
1 1 0 1 - arithmetic shift right