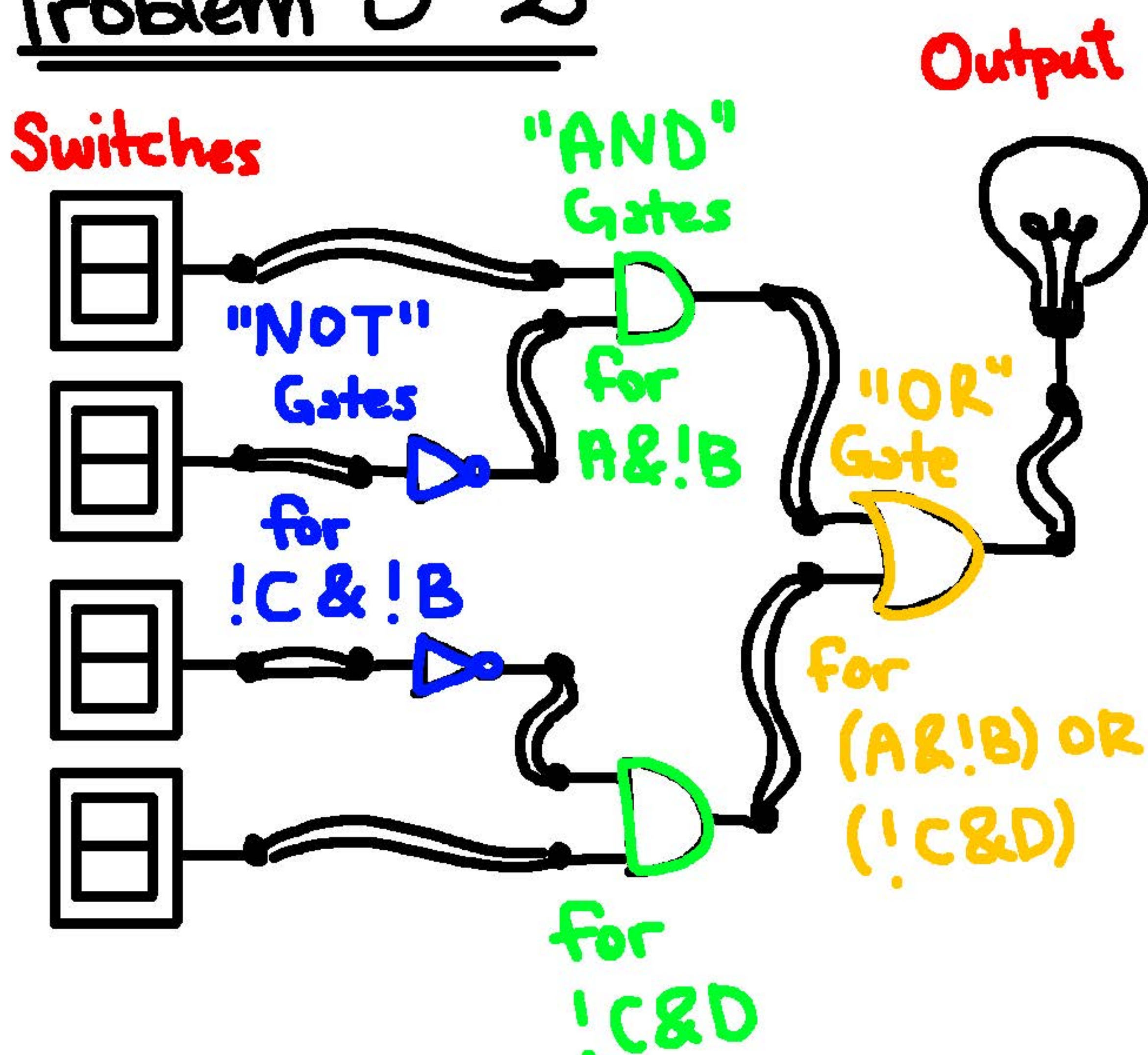


# Problem 5-2



# Problem 5-3

icode: ifun  $\leftarrow M_1[PC]$   
 rA: rB  $\leftarrow M_1[PC+1]$   
 valP  $\leftarrow PC+2$

} Fetch

valA  $\leftarrow R[rA]$   
 valB  $\leftarrow R[rB]$

} Decode

grabbing the registers' values

valE  $\leftarrow \text{valA} + \text{valB}$   
 Set CC

} Execute

actually performing the operation, then setting our flags. Our added value is valE

} Memory

$R[rB] \leftarrow \text{valE}$  } Write Back

Writing our summed value back to rB, equivalent to  $R[\text{rB}] = \text{valE}$  where rB is a register

$PC \leftarrow \text{valP}$  } PC update

Setting PC back to valP originally when we offset by 2 in "fetch"