

CS1026

Lab #3

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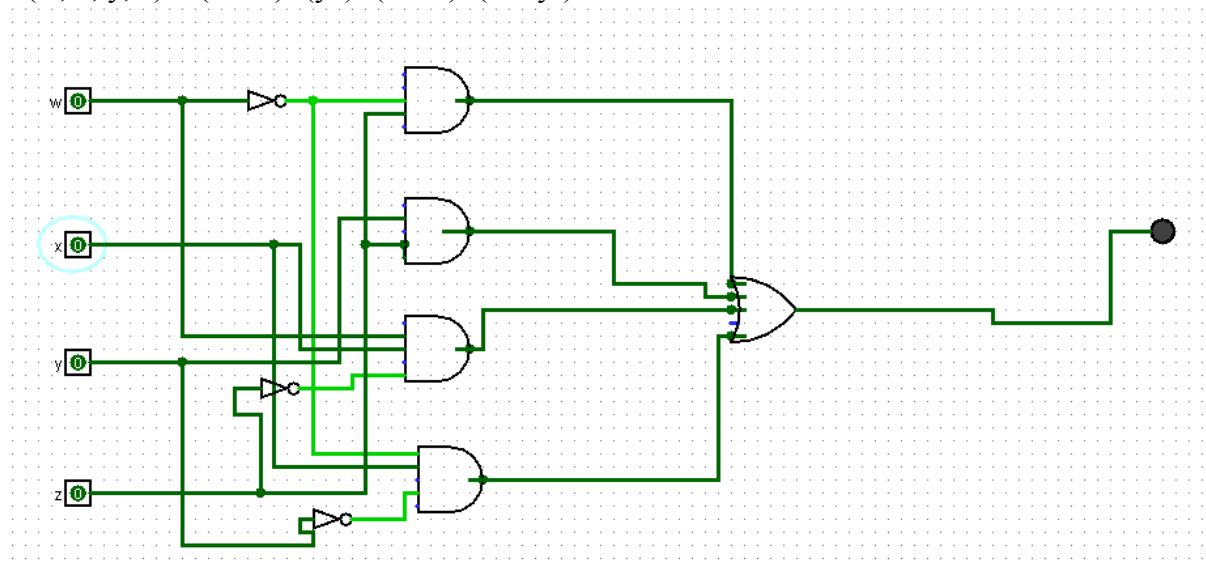
$F(W, X, Y, Z) = \text{Sigma } m(1, 4, 5, 11, 12, 14, 15)$ • Note: Sigma md(2, 3, 7, 9) (don't cares)

NOR gate logic

Inputs		Outputs
A	B	Y
0	0	1
0	1	0
1	0	0
1	0	0

After doing a Karnaugh map I obtained this answer:

$$F(w, x, y, z) = (w' + z) + (yz) + (wxz') + (w'xy')$$



When x or z is a 1 then the LED lights up irregardless of the other inputs.