Lab 8: NMOS Transistors

Names:

Experiment 1:

MOS transistors can be used as voltage controlled switches, i.e. they act like a wire when a certain voltage is applied to the gate and act like an open circuit when a different voltage is applied to the gate. In the case of NMOS, a high gate voltage will close the switch (transistor ~ wire) and a low voltage (e.g. ground) will open the switch (transistor ~ wire). Before building the following circuit, determine whether or not the LED will light up.

After you've done this, consider what would happen if you short the gate to ground instead of +Vsupply. Modify your circuit to verify the result and describe it below.