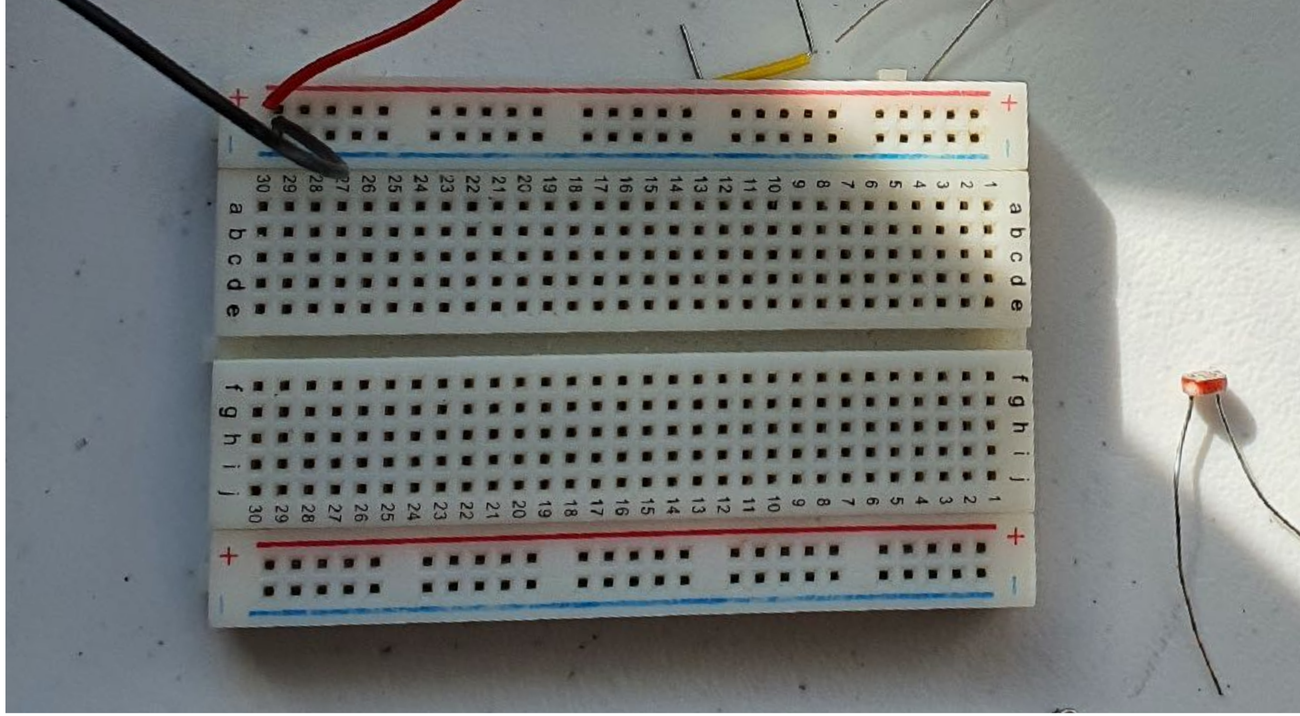
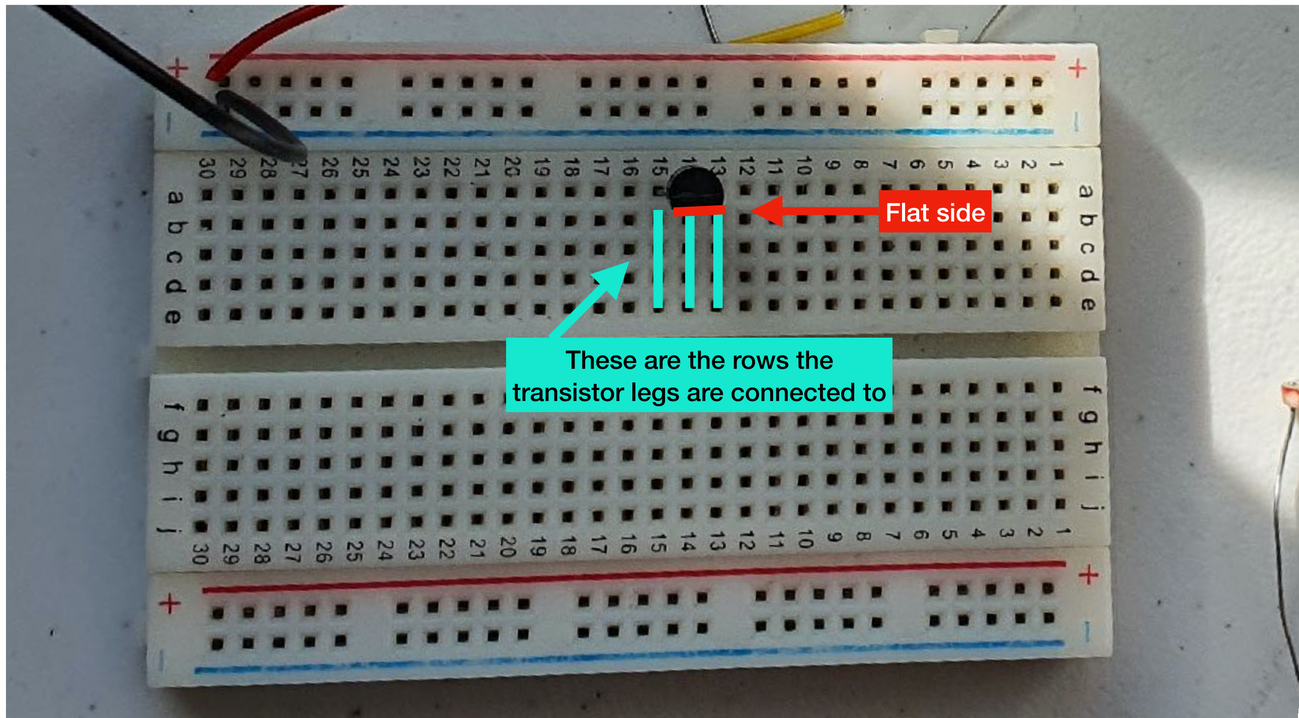
Step 1: Empty Breadboard

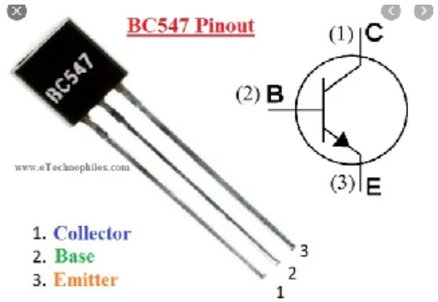


Step 2: Add NPN transistor

Note that in the image to the right, the flat side is facing towards you.



Step 3: Emitter to ground



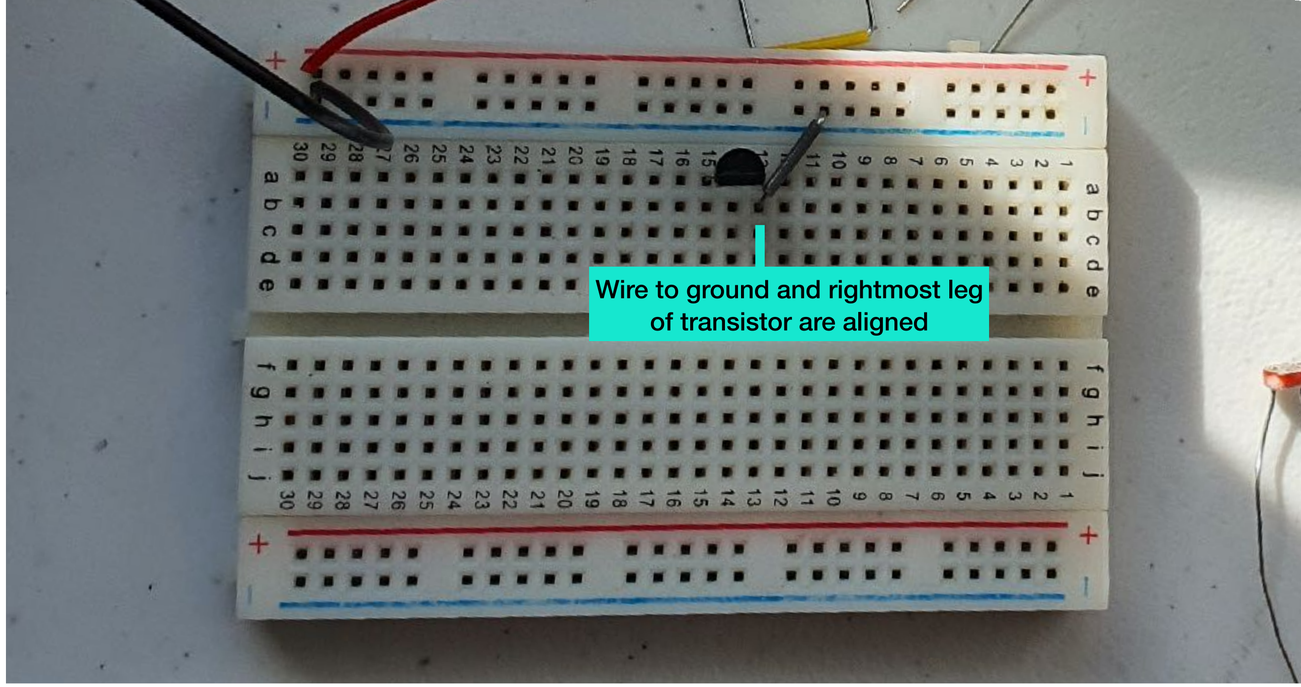
Emitter-Negative

Base-Depends on the circuit

Collector-Positive

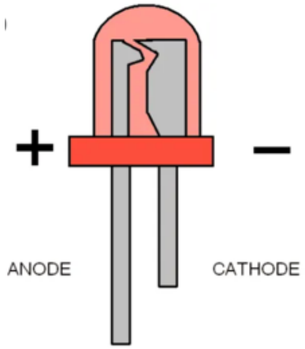
We connect the rightmost leg (the emitter) to ground.

Note: The schematic above is for The NPN transistor I have. It I labelled BC547. The schematic will tell you Which leg is which. (Quick google search to find the schematic)

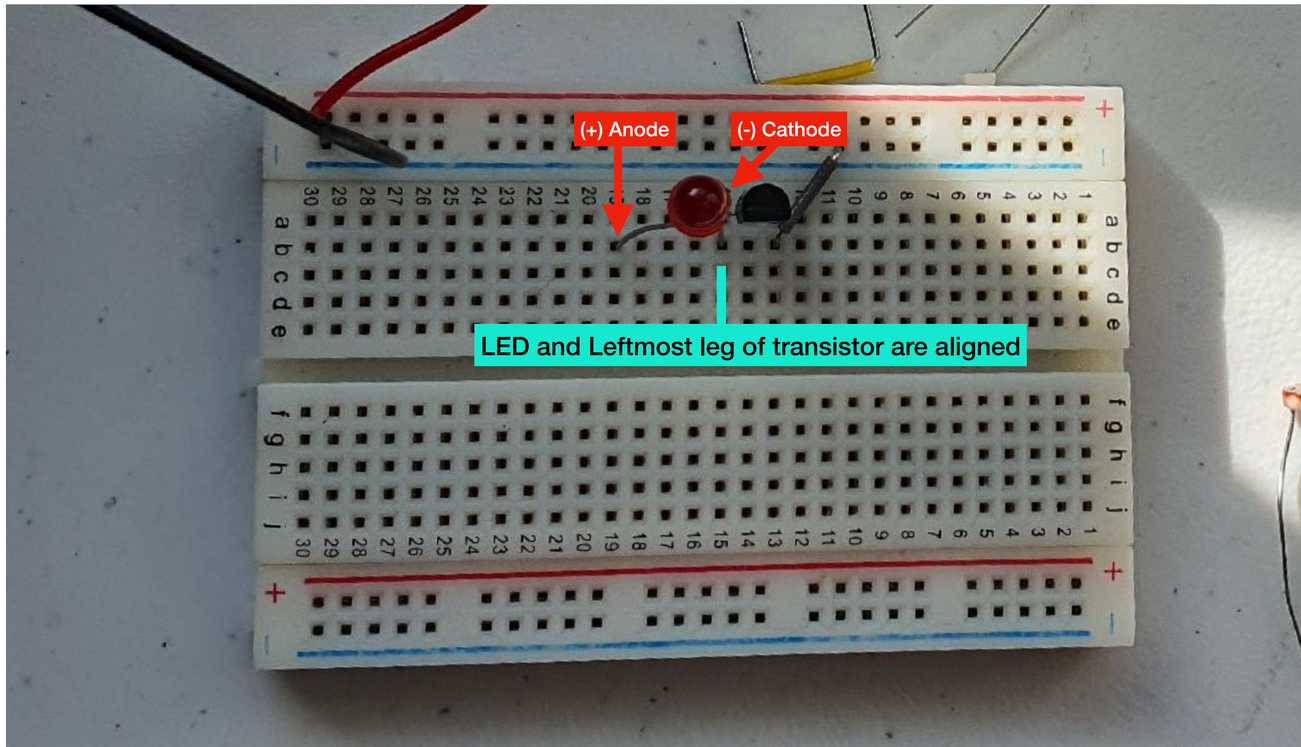


Step 4: LED to Collector

Longer leg
Connects to power



Flat side
Shorter leg
Connects to ground

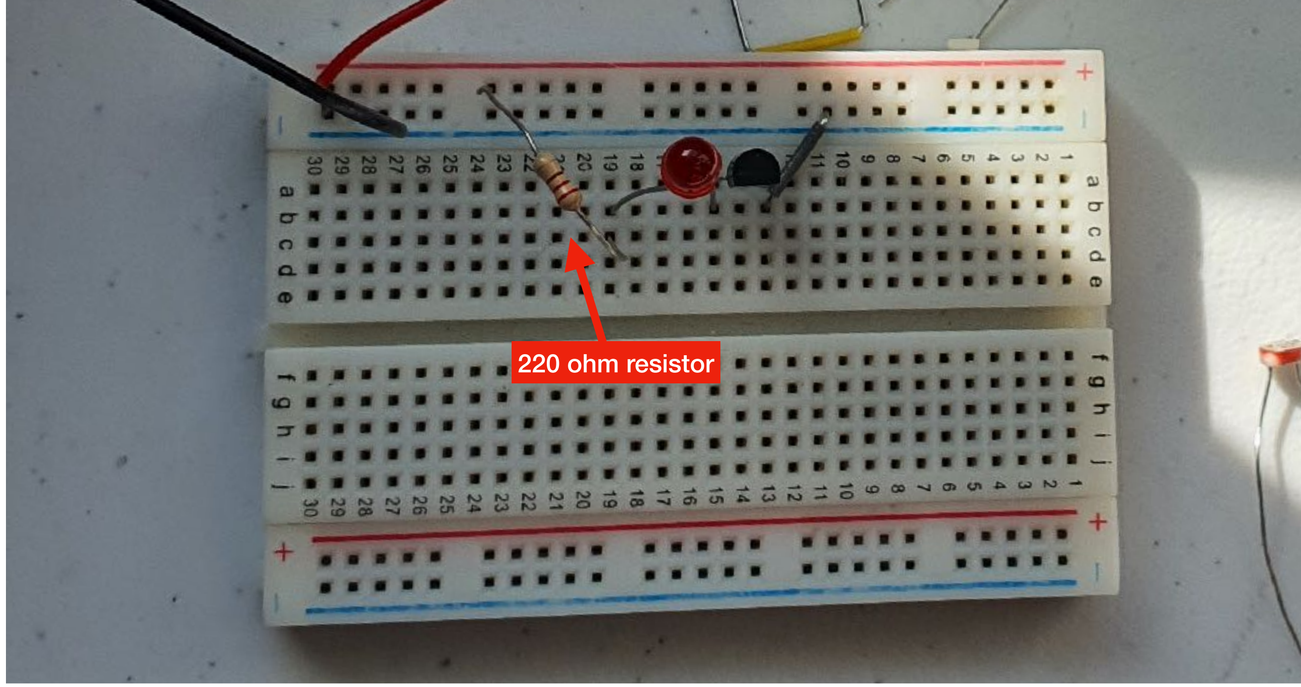


Step 5: Close LED loop

Like before, we close the LED circuit
by connecting a 330 ohm resistor
(Orange, orange, brown, gold)

This resistor connects the LED anode
To power

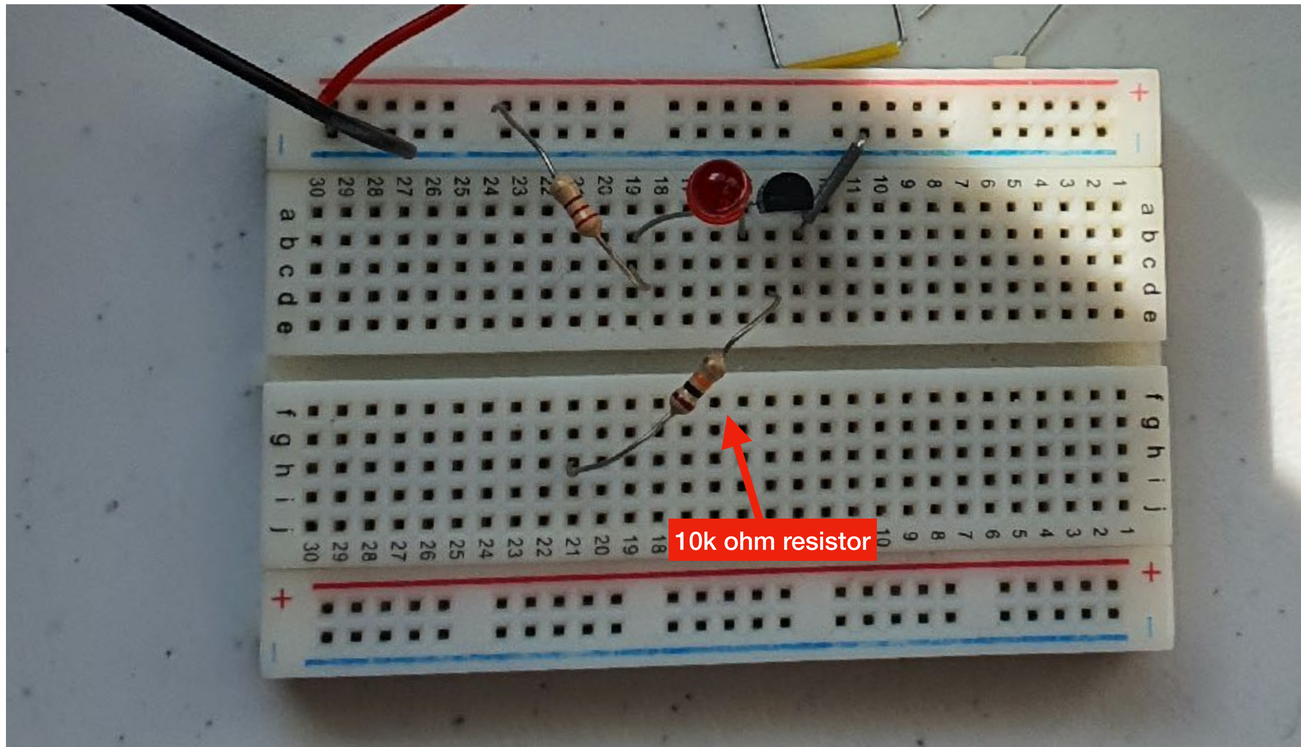
Note: The resistor in the image
is 220 (red red brown gold)
It works too.



Step 6: 10k resistor to NPN Base

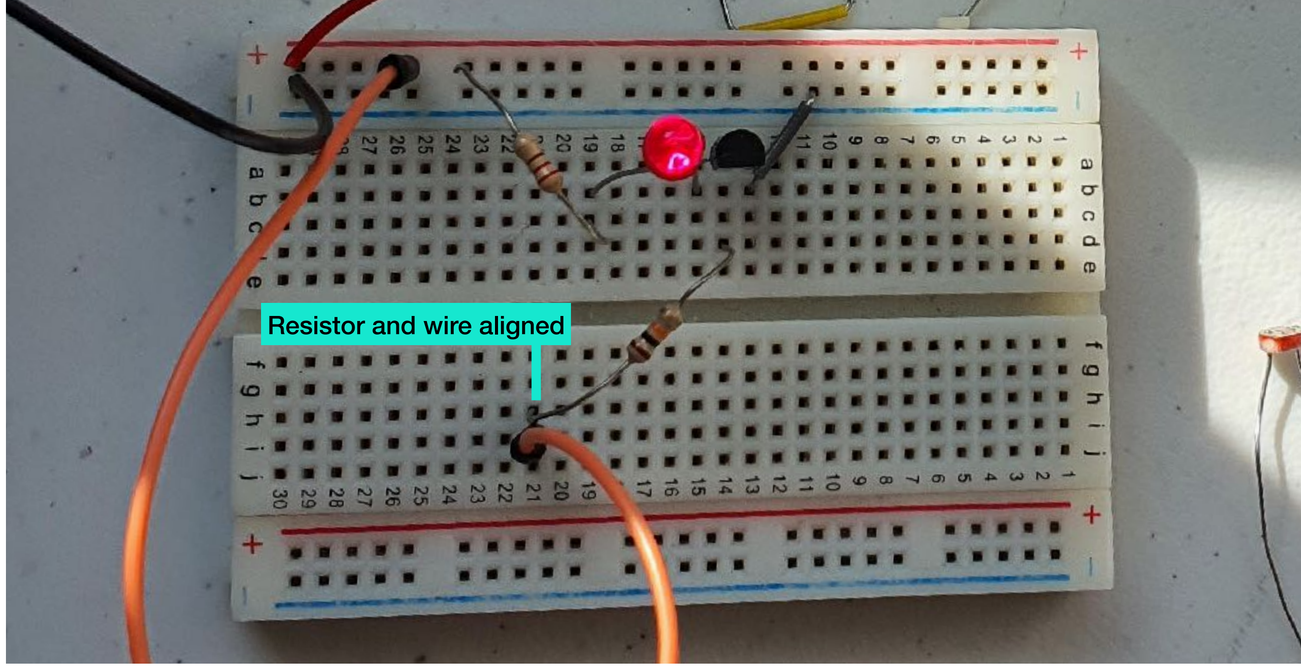
Connect a 10k ohm resistor (brown, black, orange, gold)
to the middle leg (base) of the transistor.

It is important to make sure that you put the 10k ohm resistor.



Step 7: 10k ohm resistor to power

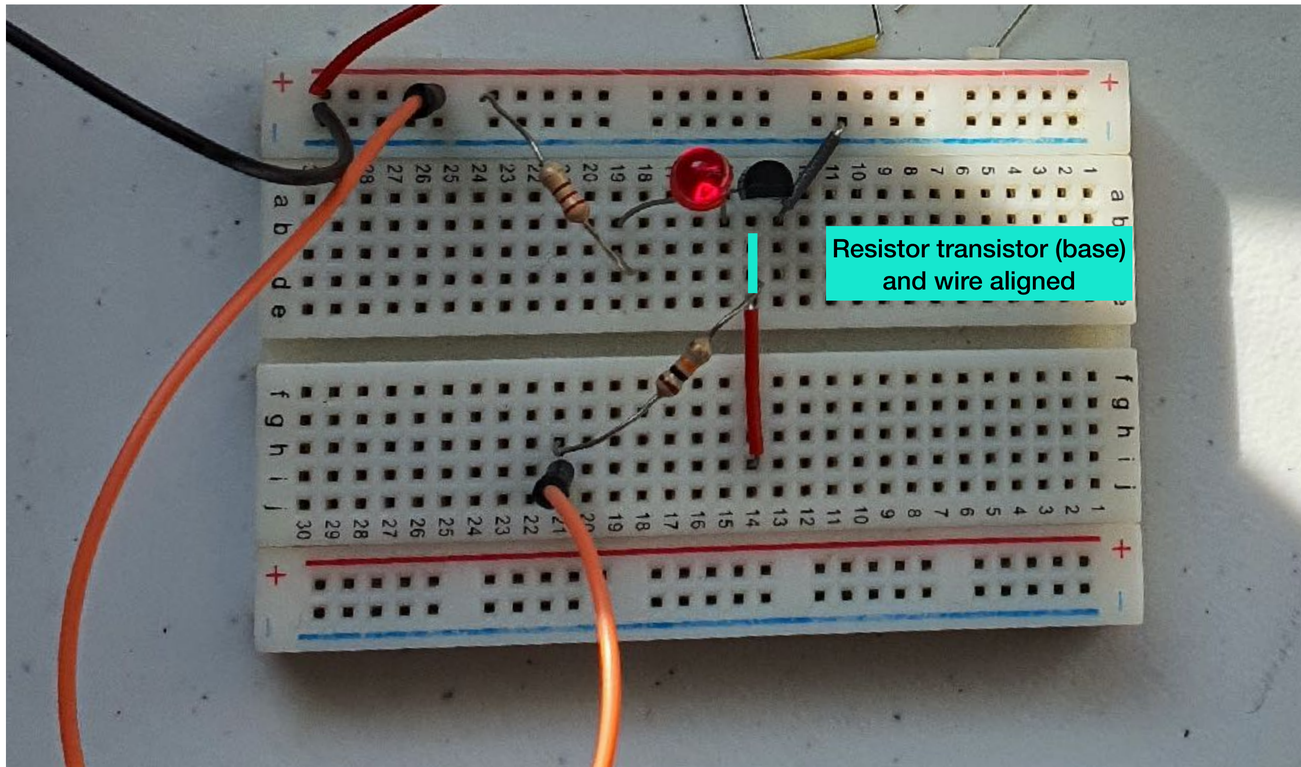
We connect the 10k ohm resistor to power.
In the image, this is done with the ling orange wire.



Step 8: Add a wire for photoresistor

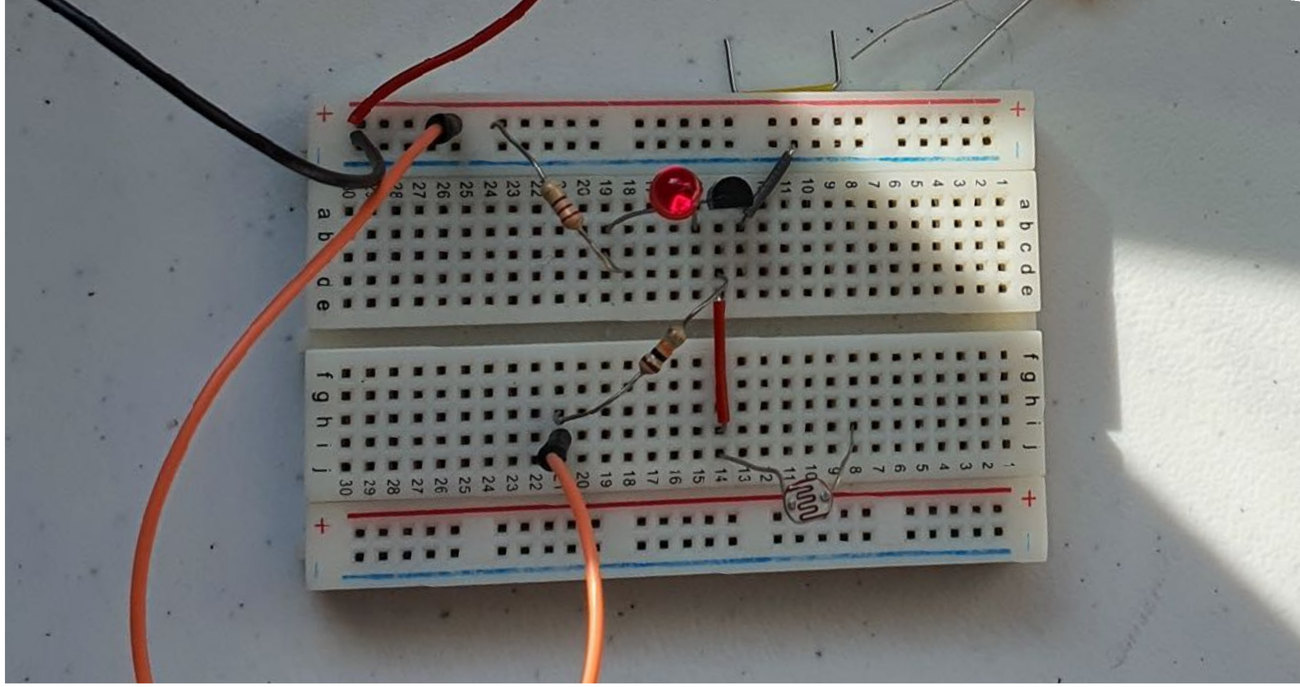
This is the red wire in the image.

3 things in that row are aligned:
- The middle leg of the transistor (base)
- The 10k ohm resistor
- The wire we just added that is currently connected to nothing.



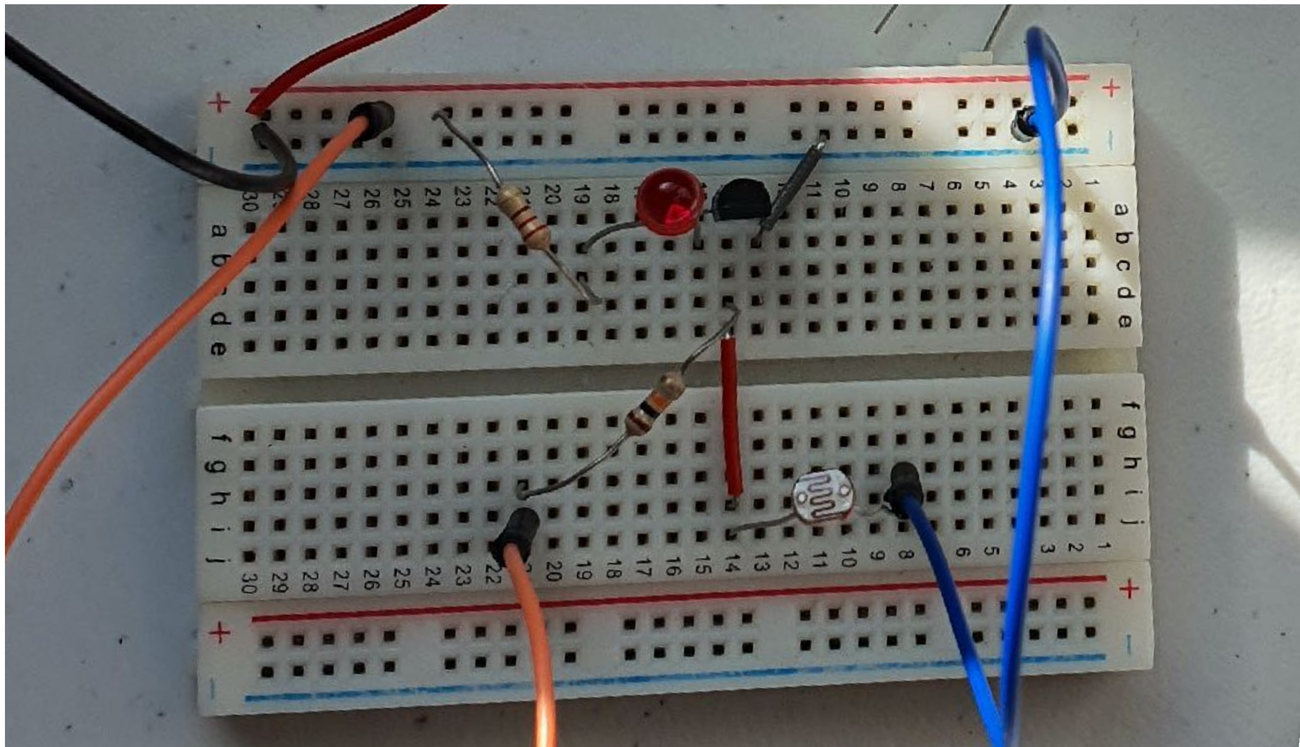
Step 9: Connect photoresistor to base

We connect our photoresistor to the red wire from the previous step



Step 10: Close photoresistor loop

For the final step, we connect the other leg of the photoresistor to GND (ground).



Final Step: WATCH IT GLOW IN THE DARK!!!