3.7V Battery Low and Full Level Indicator Circuit
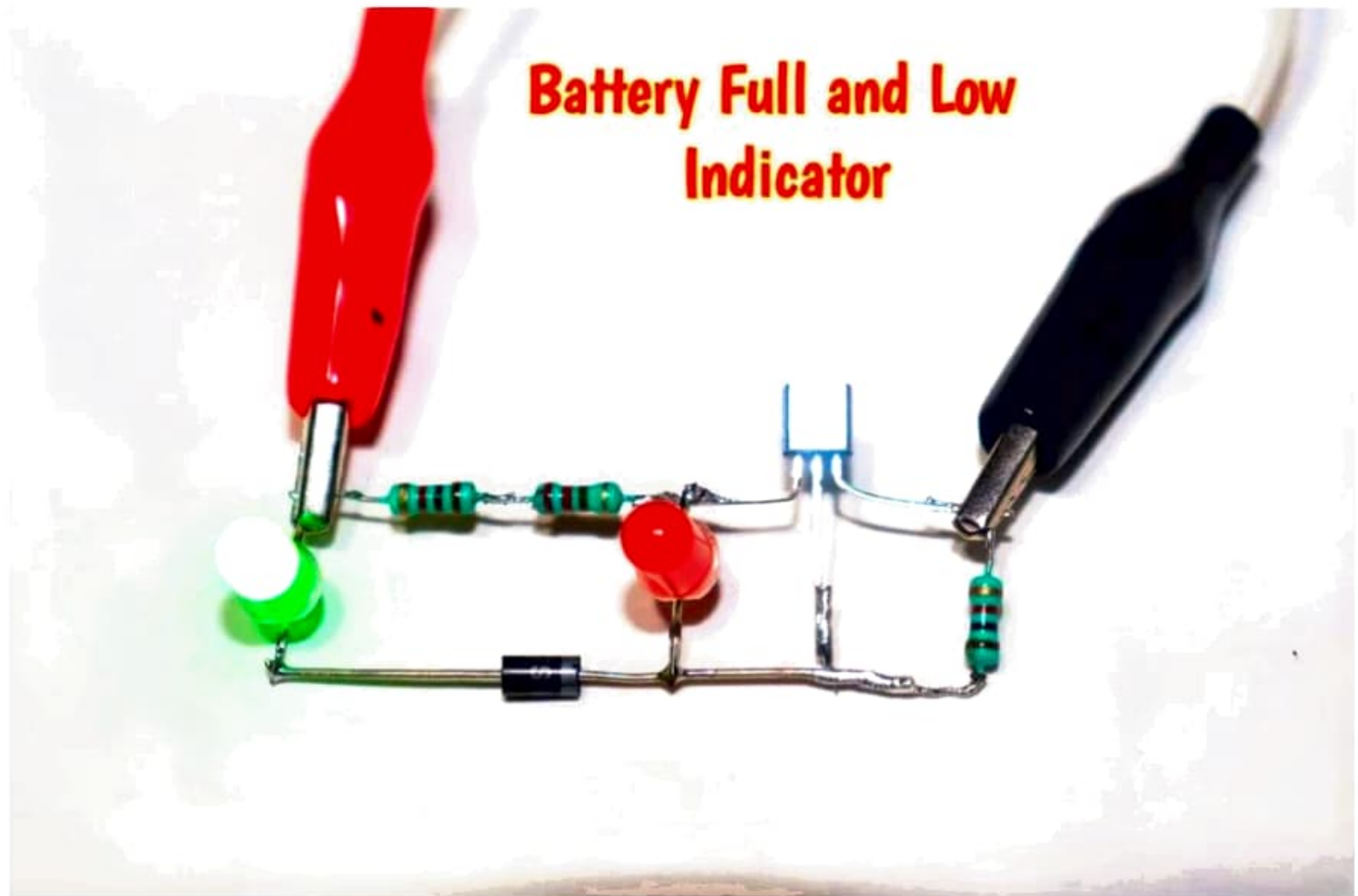
Introduction: 3.7V Battery Low and Full Level Indicator Circuit

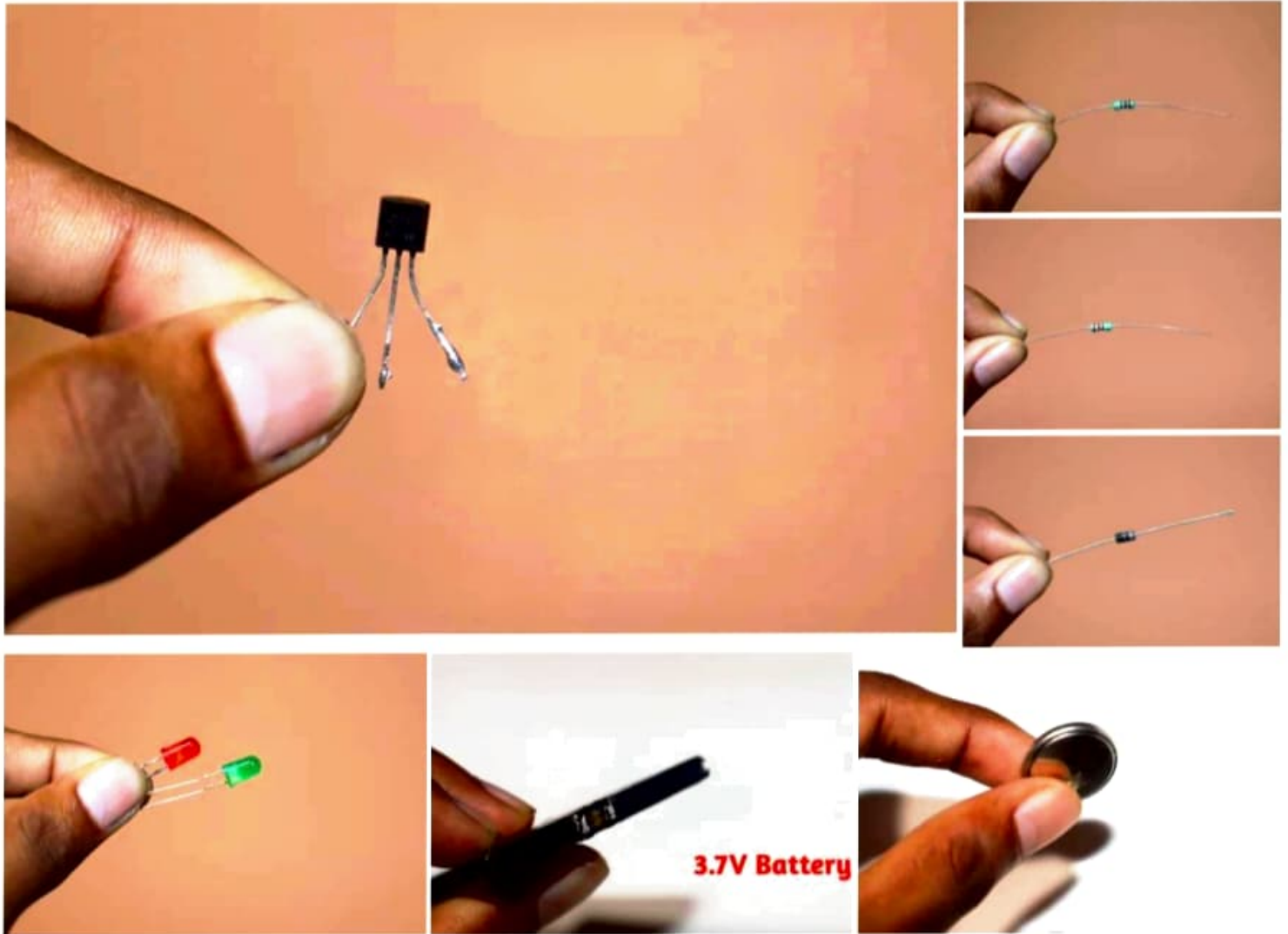

Battery Full and Low Indicator

Hii friend,

Today I am going to make a circuit of 3.7V Battery low and full charge indicator.

Let's get started,

Step 1: Take All Components As Shown Below

3.7V Battery

Components required –

(1.) Transistor - BC547 x1

(2.) Resistor - 1K x2

(3.) Resistor - 220 ohm x3

(4.) pn-Junction Diode - 1N4007 x1

(5.) LED - 3V x2 (Red for Low charge indication and Green for Full charge indication)

(6.) Battery - 3.7V and 3V

Step 2: Connect 1k Resistor

Firstly we have to connect 1K resistor to Base and emmiter pin of the transistor as solder in the picture.

Step 3: Connect 220 Ohm Resistor

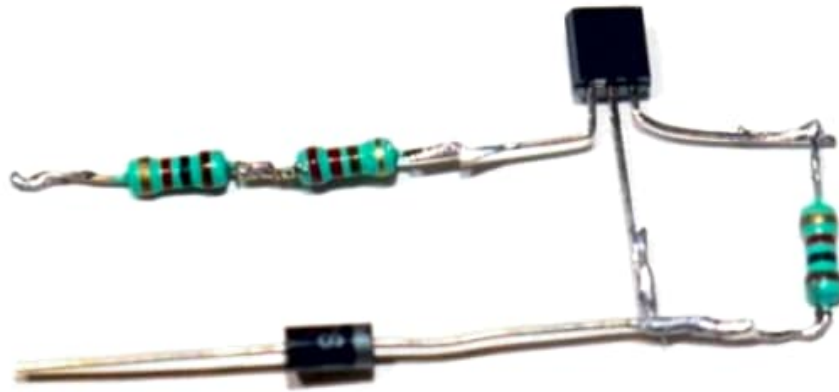Next solder 220 ohm resistor to collector pin of the transistor as you can see in the picture.

Step 4: Connect 1K Resistor Again

Next we have to connect 1K resistor again.

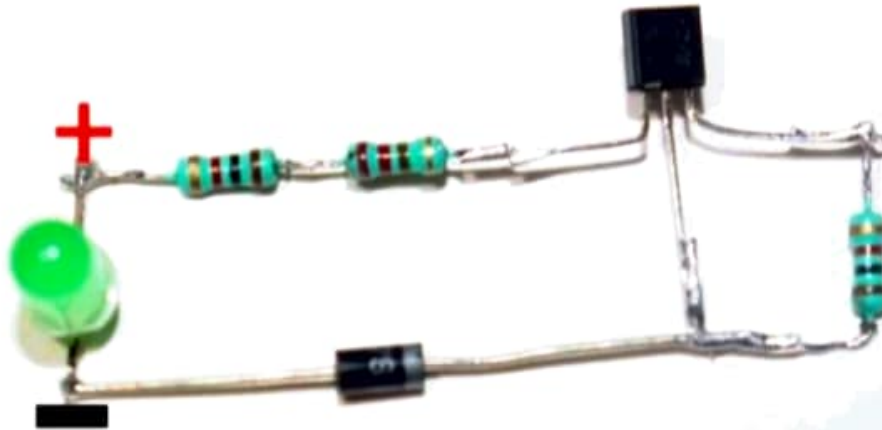Solder 1K resistor in series to 220 ohm resistor as solder in the picture.

Step 5: Connect 1N4007 Diode

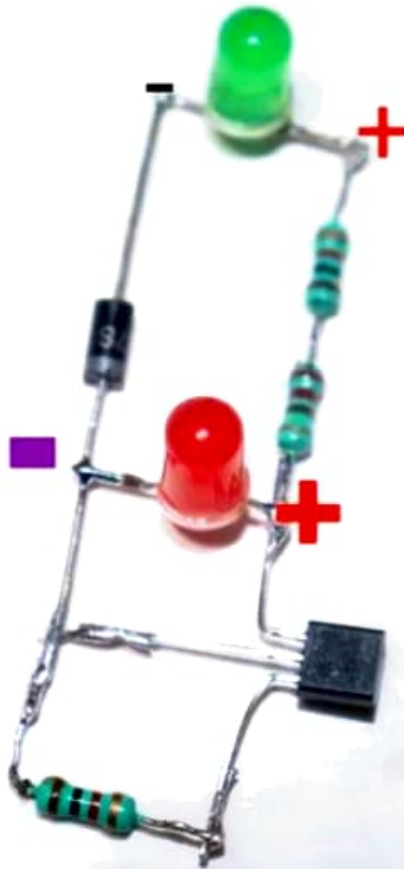Next connect 1N4007 Diode to the circuit.

Solder -ve of Diode to base pin of Transistor as picture.
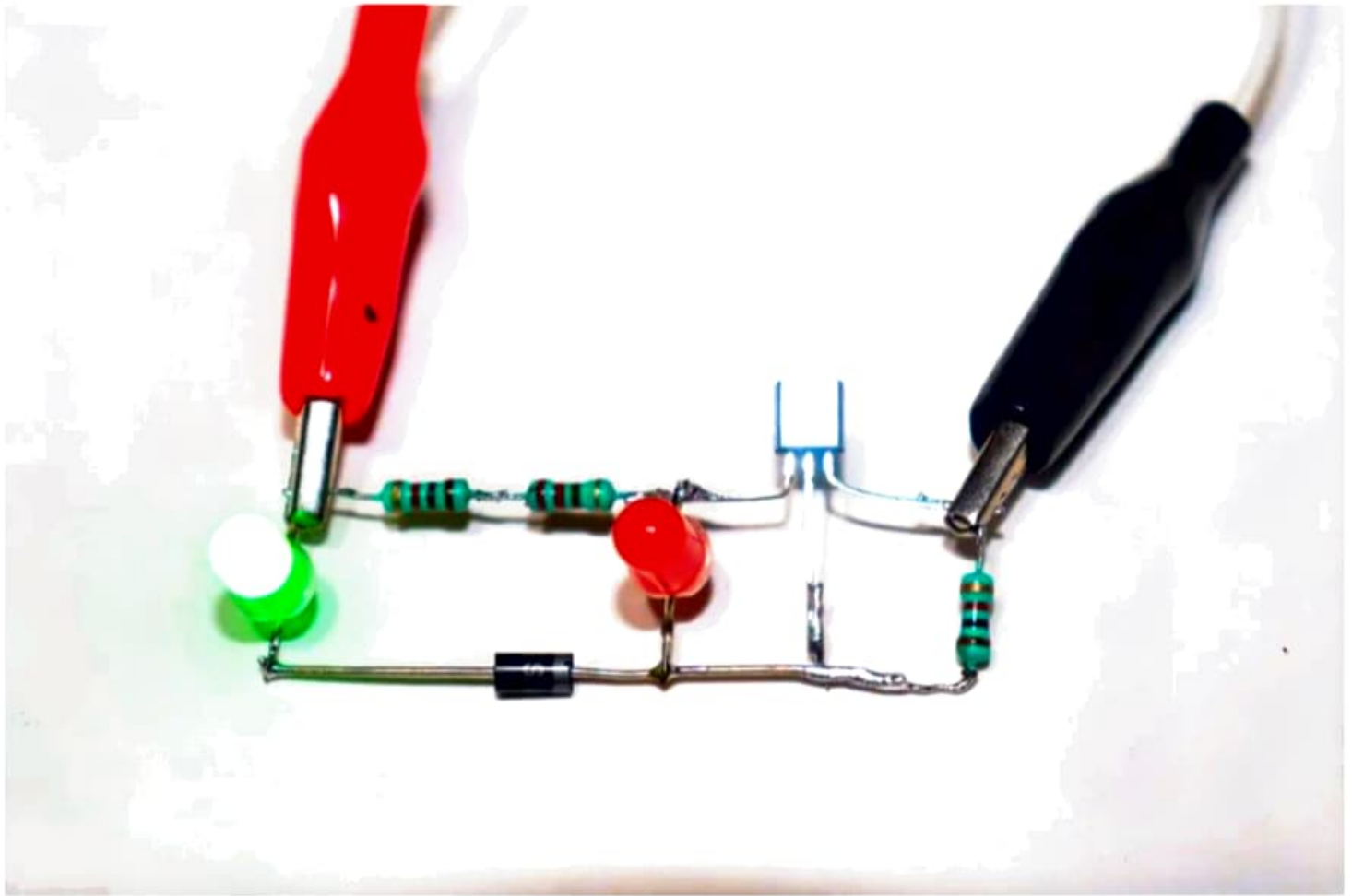
Step 6: Connect Green LED

Next Solder +ve leg of green LED to 1K resistor which is connected to collector pin of transistor and solder -ve pin of green LED to +ve of diode as you can see in the picture.

Step 7: Connect Red LED

Next Solder +ve leg of Red LED to Collector of transistor and

solder -ve leg of Red LED to -ve of diode as solder in the picture.
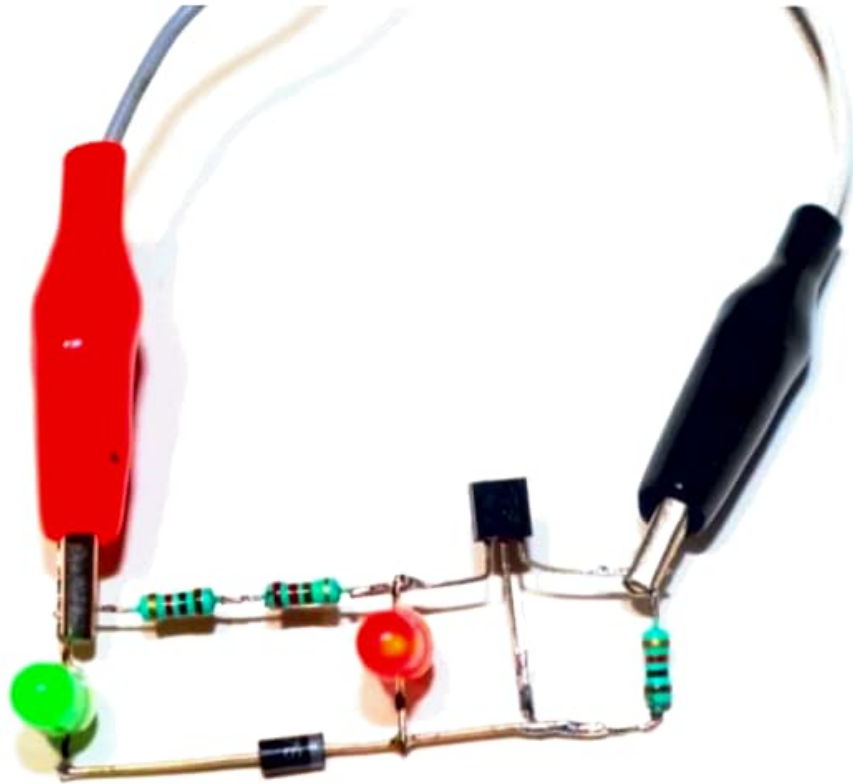
Step 8: Testing - 1

Now our circuit is completed and now we have to check this circuit.

Connect +ve of 3V battery to +ve leg of green LED and -ve of 3V battery to emmiter pin of the transist or as you can see in the picture.

~ As in abouve picture glowing Green LED Because this battery is fully charged.

Step 9: Testing - 2

When I connected 3V battery then Red LED is glowing and Green LED is also glowing in small amoun
t.

~ Hence when Battery will be full charge i.e. 3.7V then Green LED will glow only and when battery will
be low i.e. 1.5V then Red LED will glow only.

Thank you