

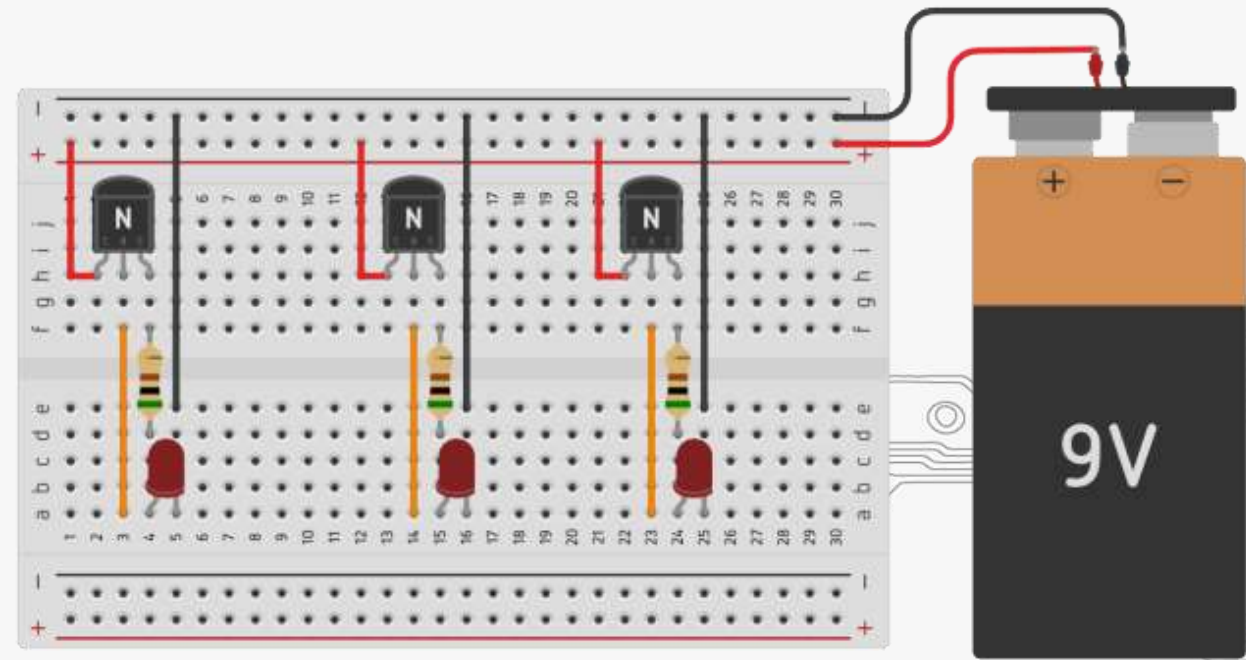
recap,

Water Level Indicator

Water level indicator using bc548 transistor

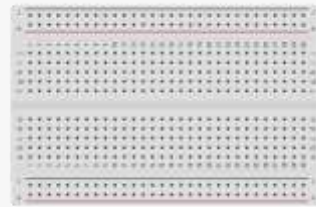
Introduction

Water Level Indicator



Required Components

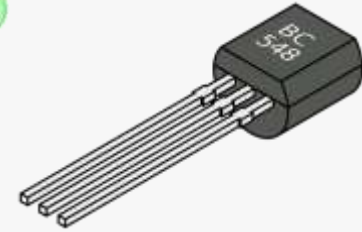
- Breadboard
- LED
- BC548/547 Transistor
- Resistor
- Snap Connector
- Jumper Wires
- Battery 9v



Breadboard



LED



BC548/547
Transistor



Resistor



Snap Connector



Jumper Wires



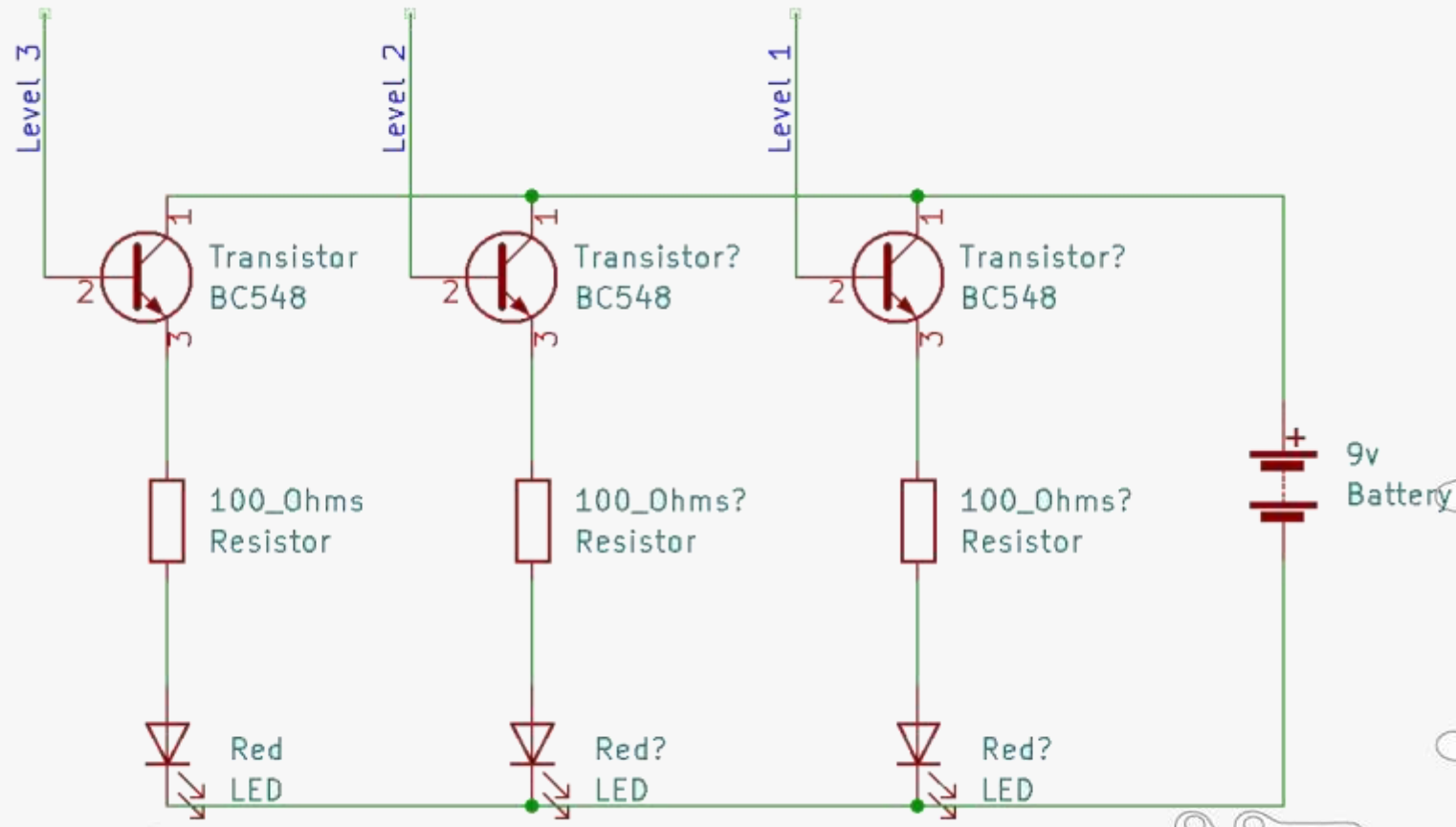
Battery 9v



Procedure

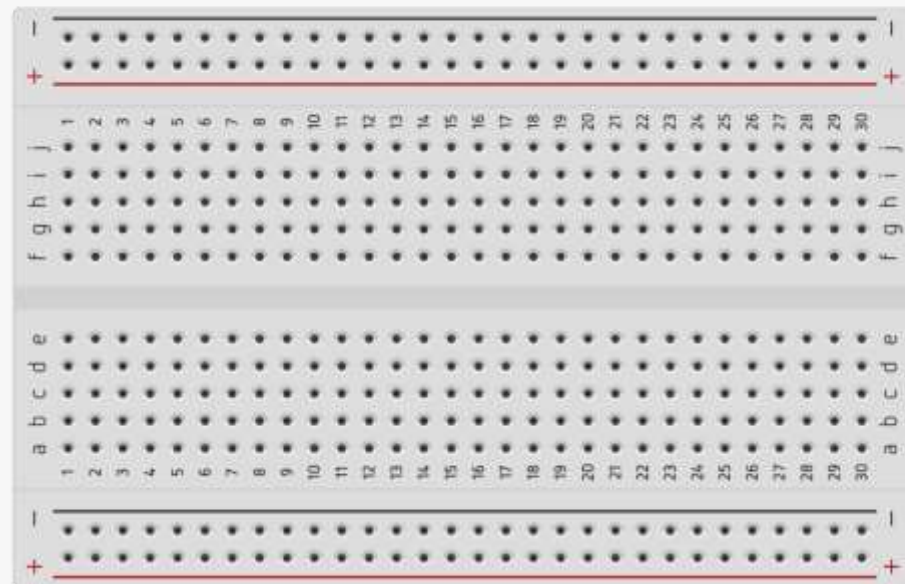
Connection Steps

Circuit diagram



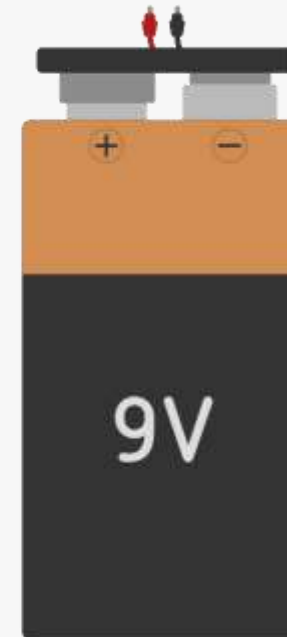
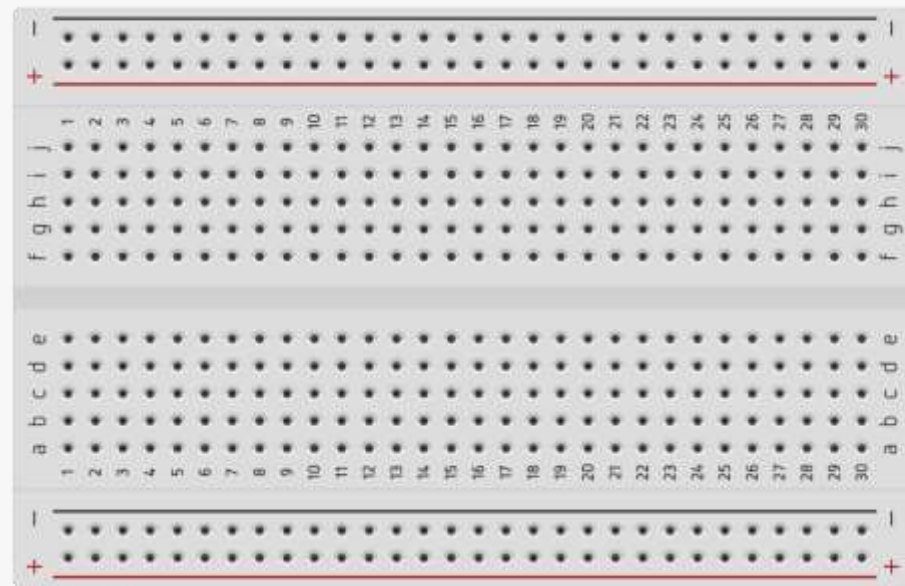
Connection Step 1

- Place breadboard



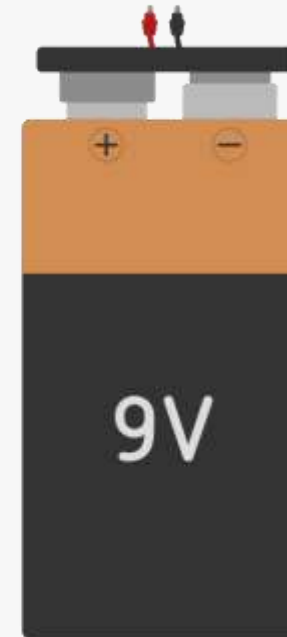
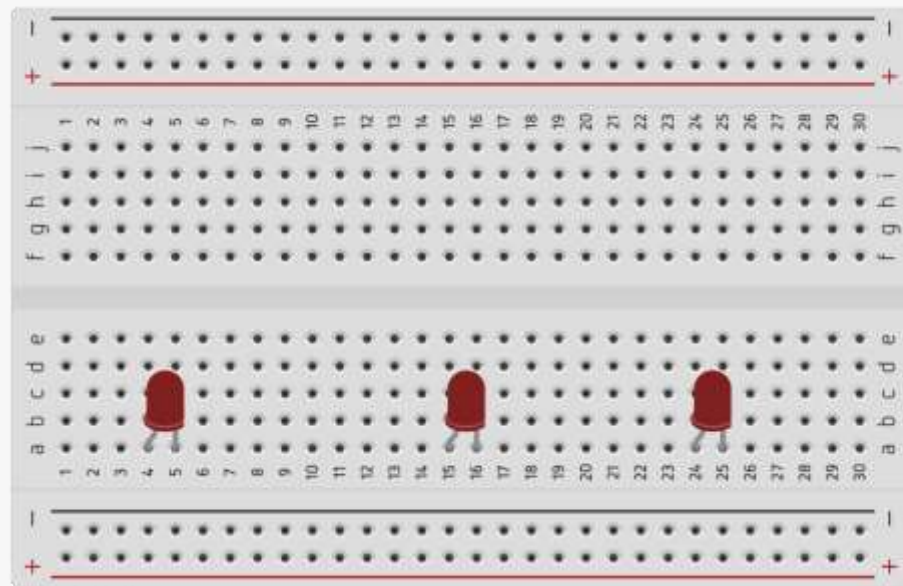
Connection Step 2

- Connect snap connector to the battery and keep it aside.



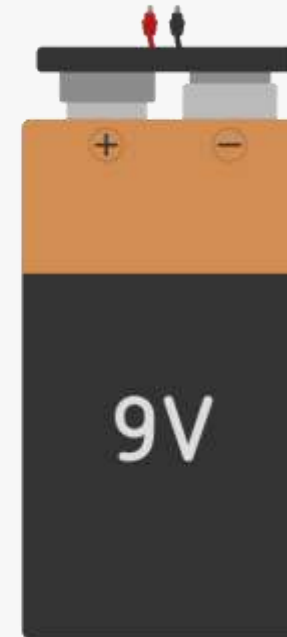
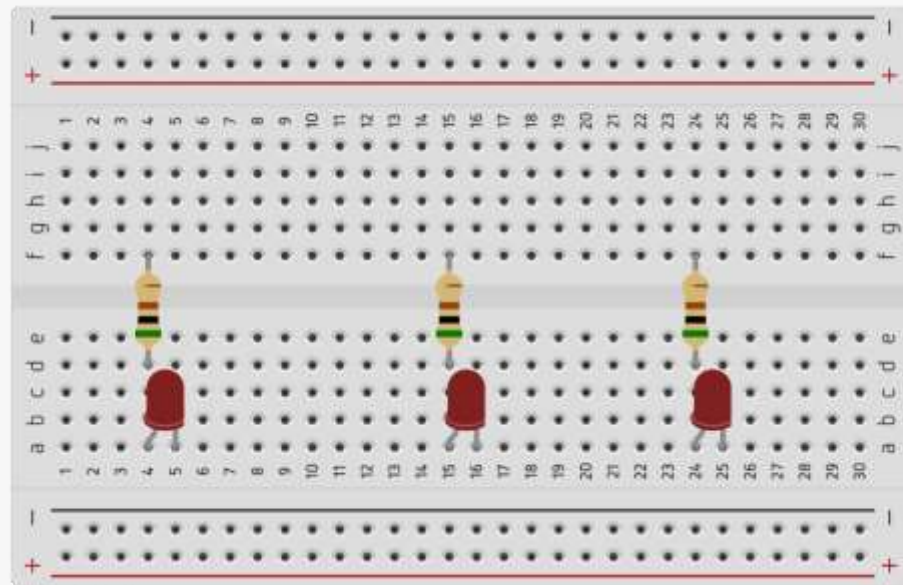
Connection Step 3

- Insert 3 LED in breadboard as shown in the diagram.



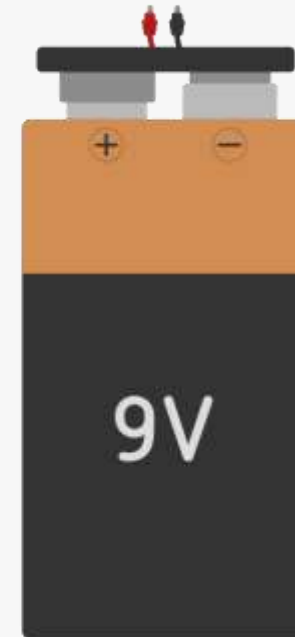
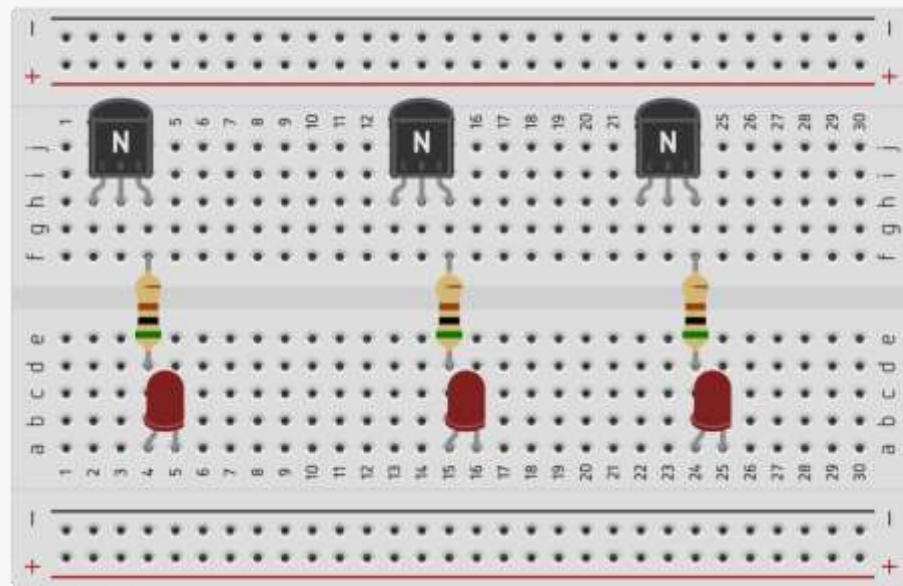
Connection Step 4

- Insert 3 resistor at anode(+) terminal of each LED as shown in the diagram.



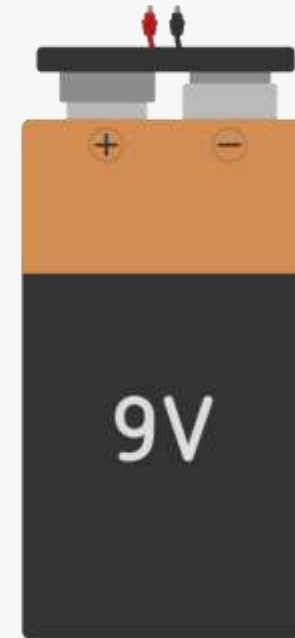
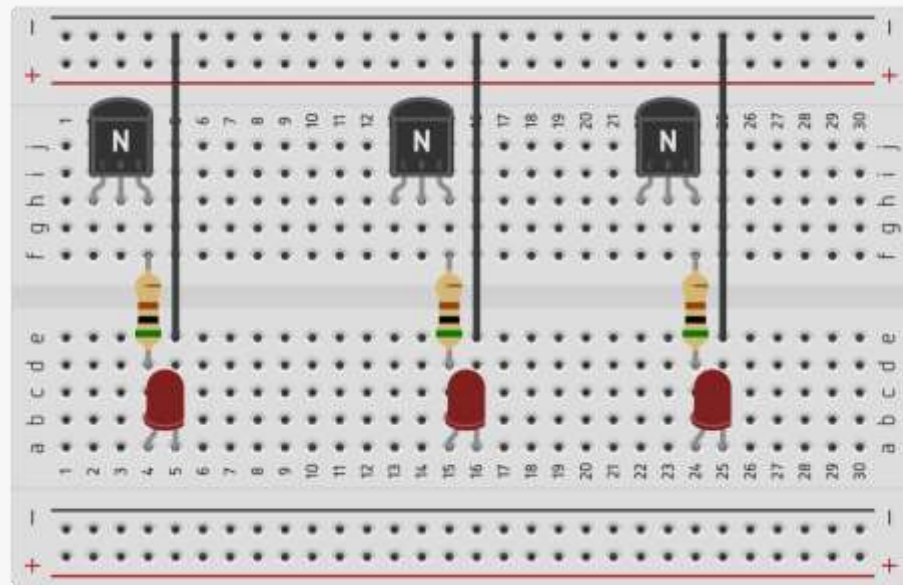
Connection Step 5

- Insert 3 BC548 transistor in breadboard and connect emitter pin to the each resistor as shown in the diagram.



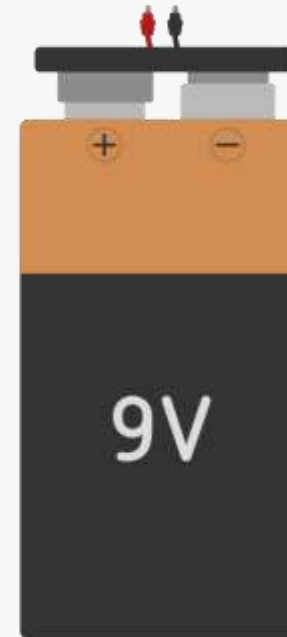
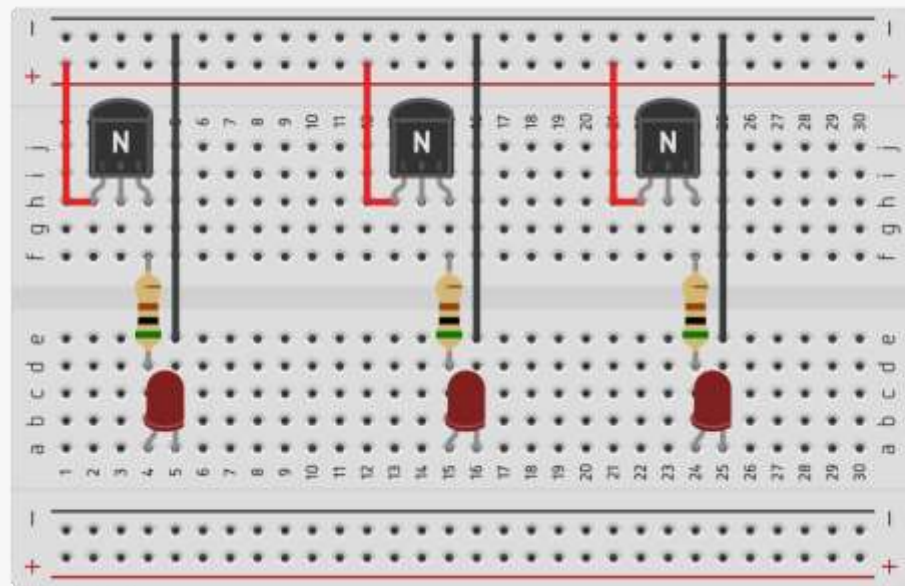
Connection Step 6

- Connect cathode(-) terminal of each LED to the (-) power rail of breadboard.



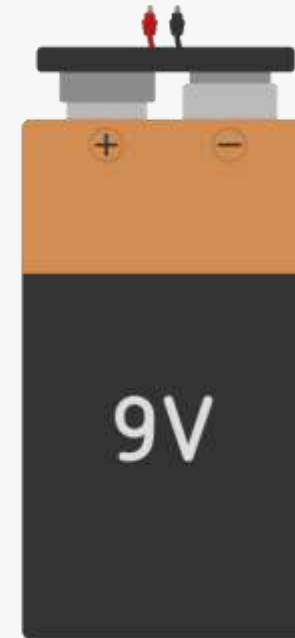
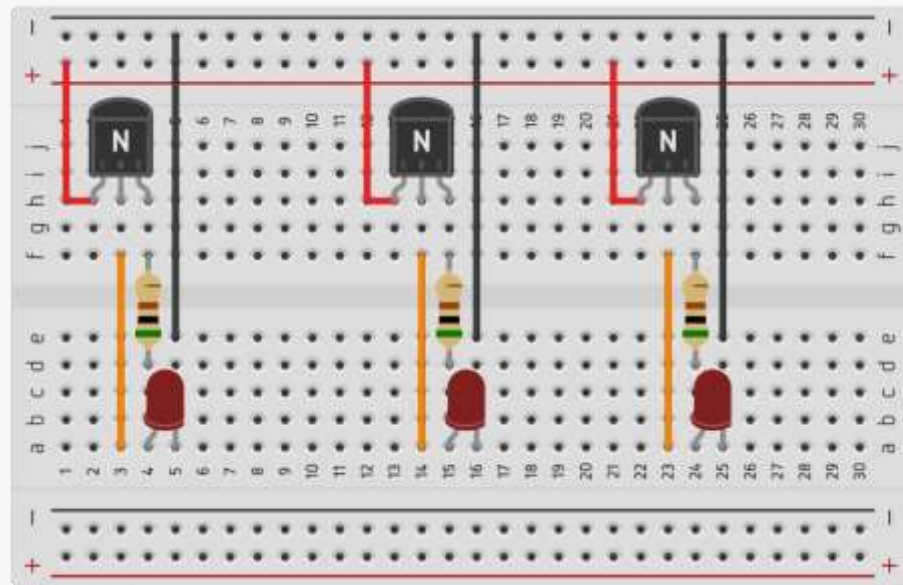
Connection Step 7

- Connect collector terminal of each transistor to the positive(+) power rail of breadboard.



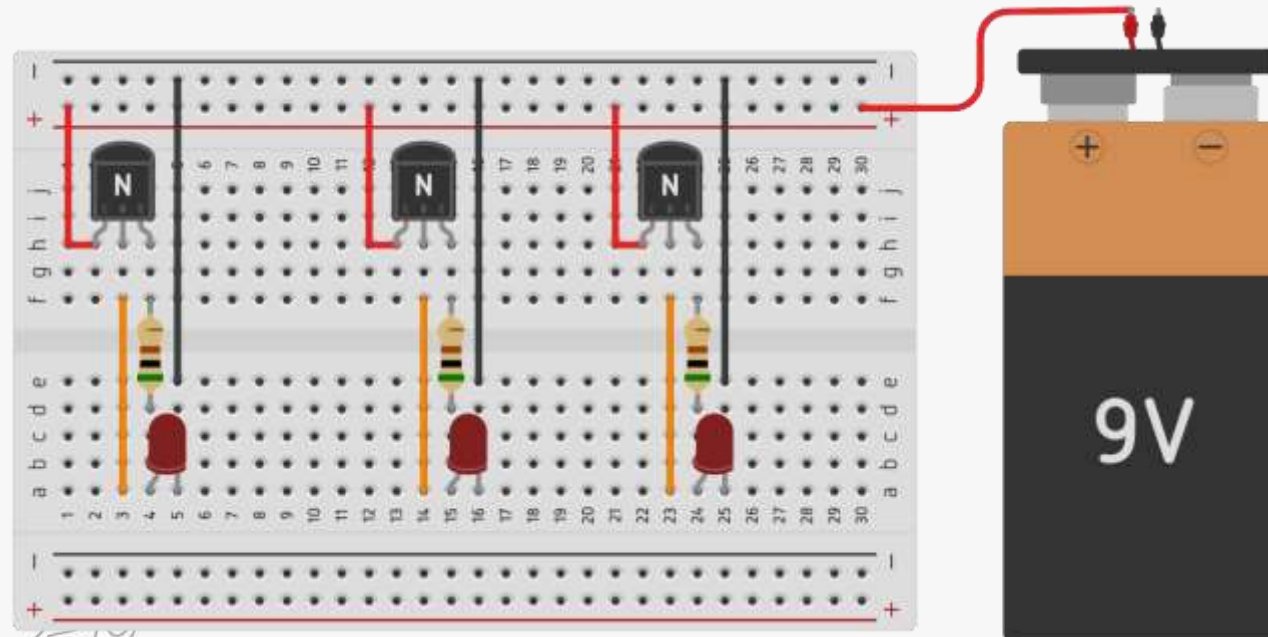
Connection Step 8

- Connect wires for level detection at base terminal of each transistor.



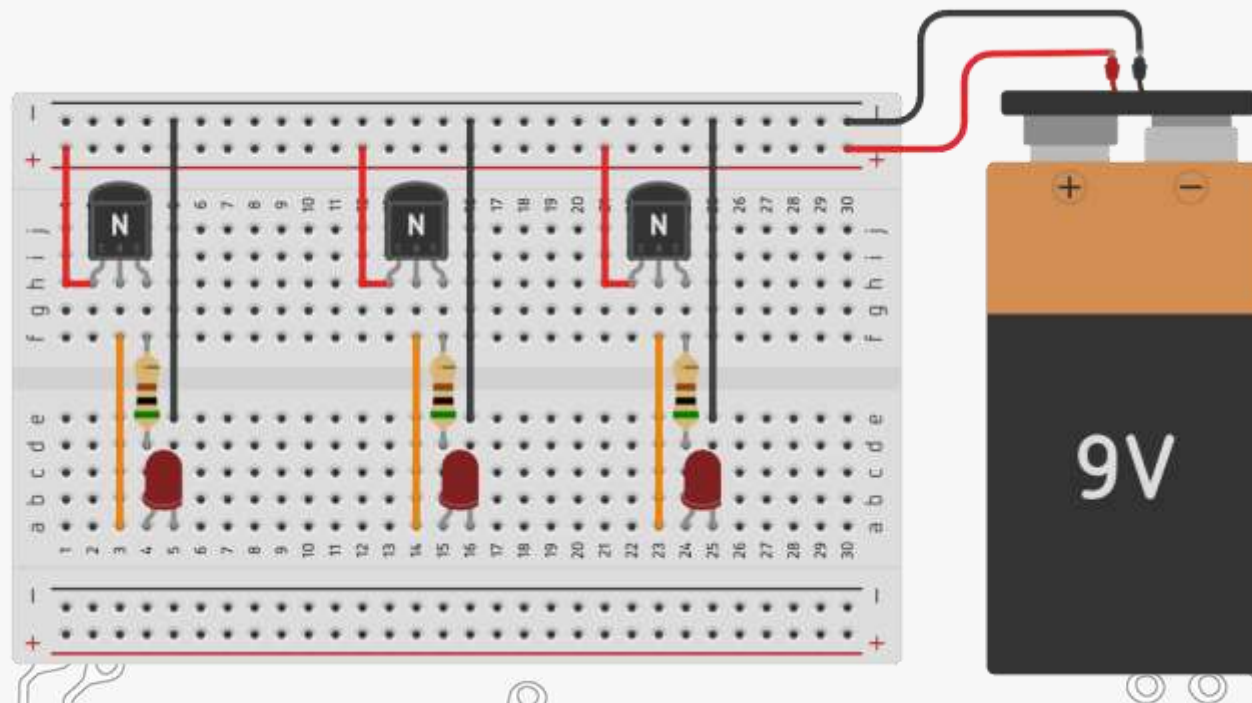
Connection Step 9

- Connect anode (+) terminal of battery to positive (+) power rail of breadboard.



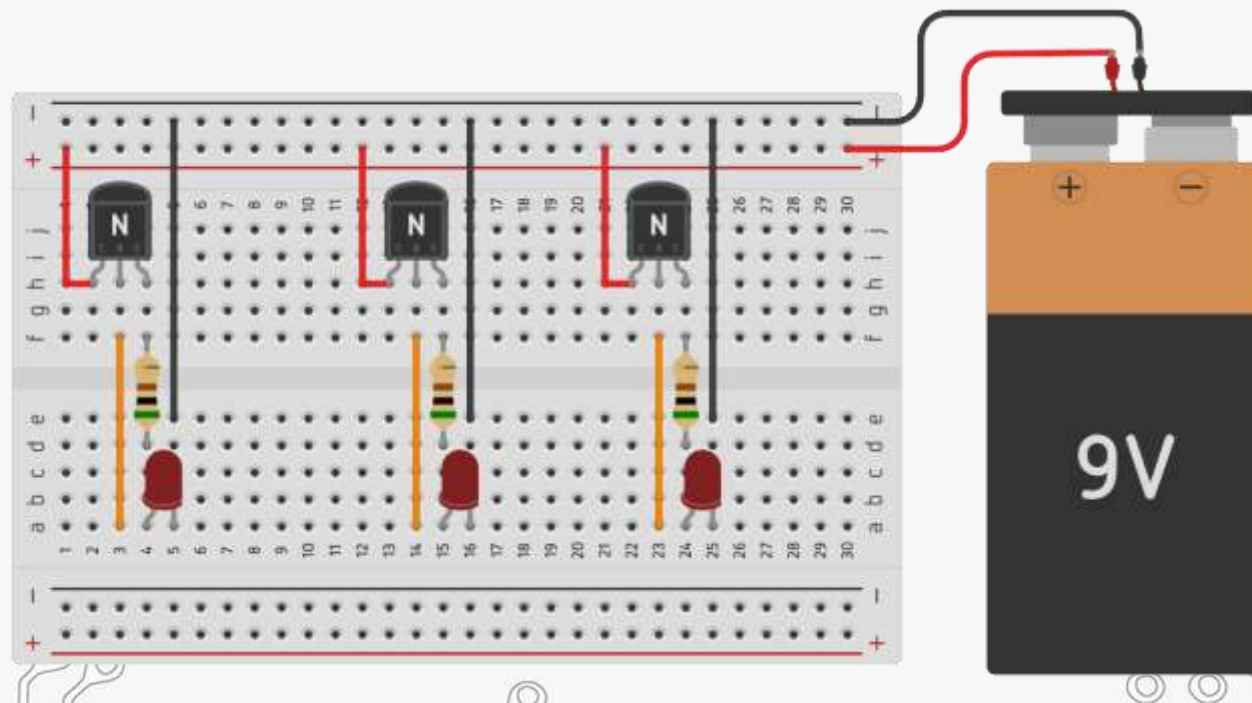
Connection Step 10

- Connect cathode (-) terminal of battery to negative (-) power rail of breadboard.



Connection Diagram

- Make sure your connections are made as per the diagram.





Data & Outcomes

Learning from the activity

Data

- How many transistors used?
- 3

Learning from the activity

- Using multiple BC548 transistor for water level detection.

Assessment



Thank you