*Student Name : YASH GUPTA Branch : CSE*

*ANAND KUSHWAH*

*UID : 20BCS5009 Section/Group : GRP – 1*

*20BCS5039*

*Date of Performance : 05/09/2020 Subject Name :* *DIGITAL*

*ELECTRONICS*

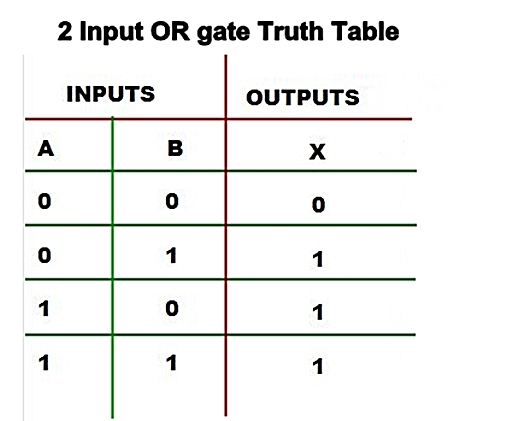
AIM

*TO VERIFY THE TRUTH TABLE FOR :-*

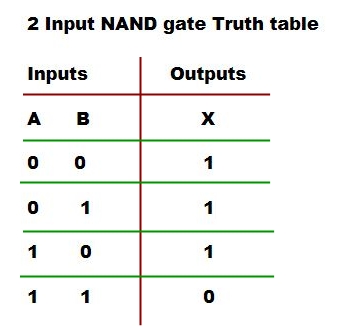
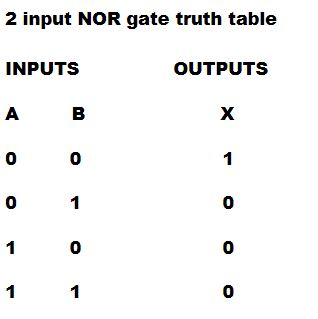
* *AND GATE*
* *OR GATE*
* *NAND GATE*
* *NOR GATE*
* *XOR GATE*
* *XNOR GATE*

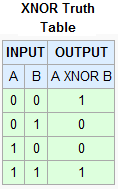
TASK TO BE DONE

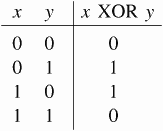
VRIFY TRUTH TABLE:-











REQUIREMENTS

***Software requirement***

* **Tinkercad**

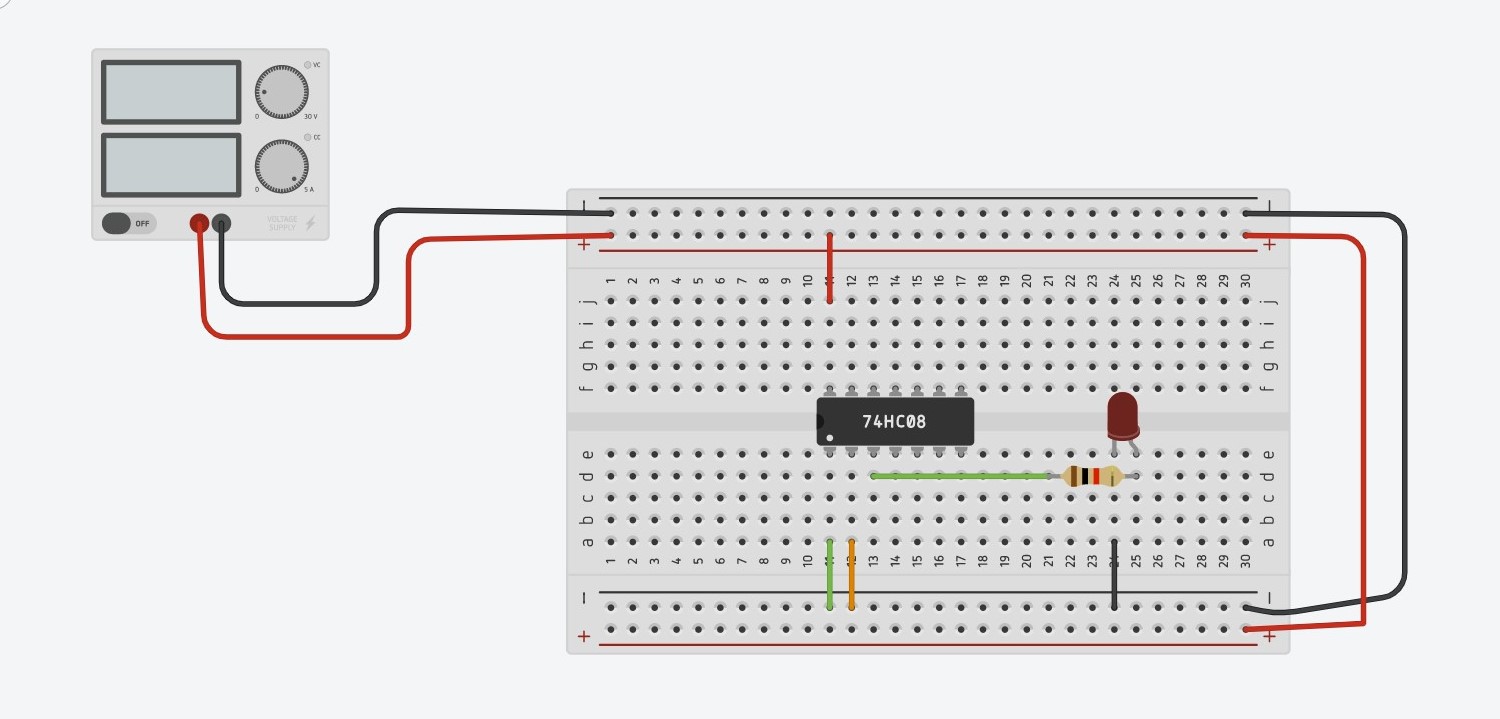
***Hard ware requirement***

* **Wire**
* **Bread board**
* **Logic Gates**
* **Power supply**
* **Led**
* **Resistor**

CIRCUIT DIAGRAM

***For AND Gate\_***

* ***A= 0***
* ***B= 0***

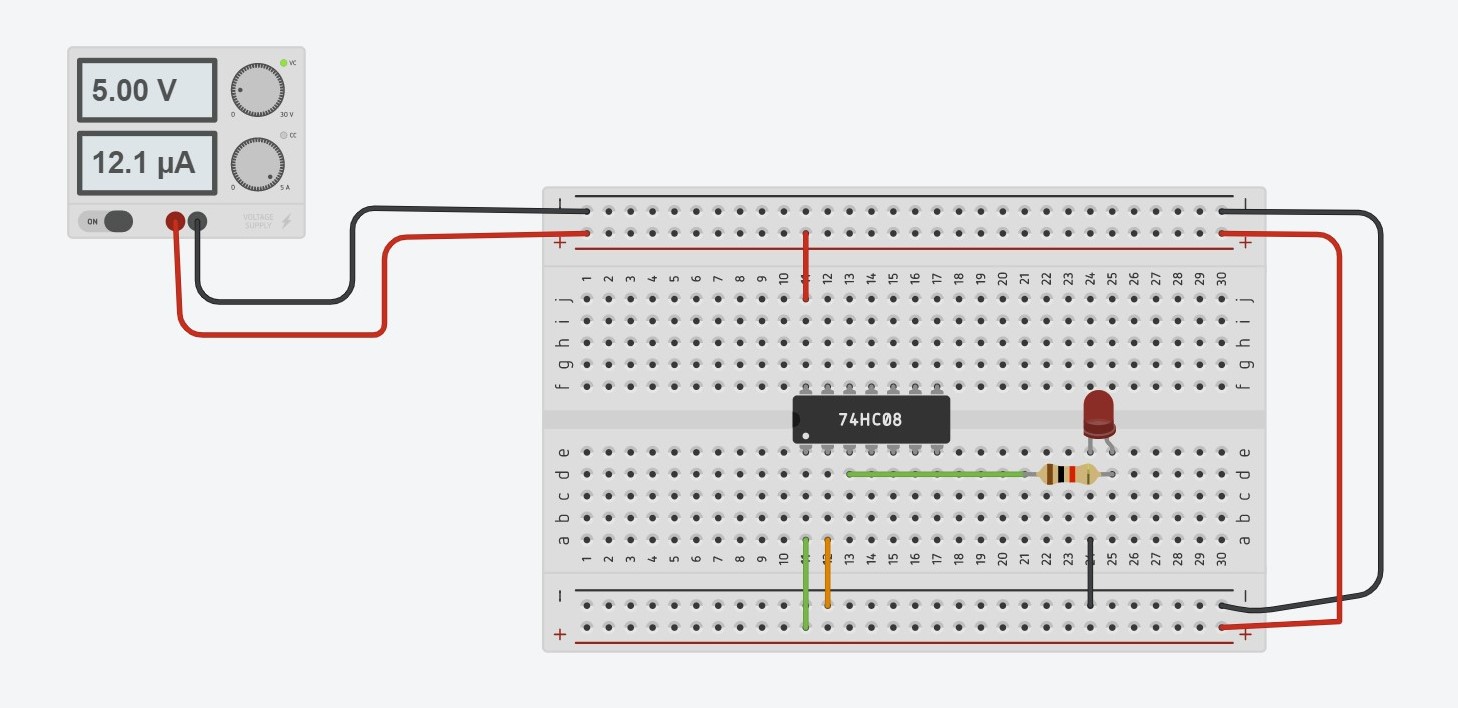




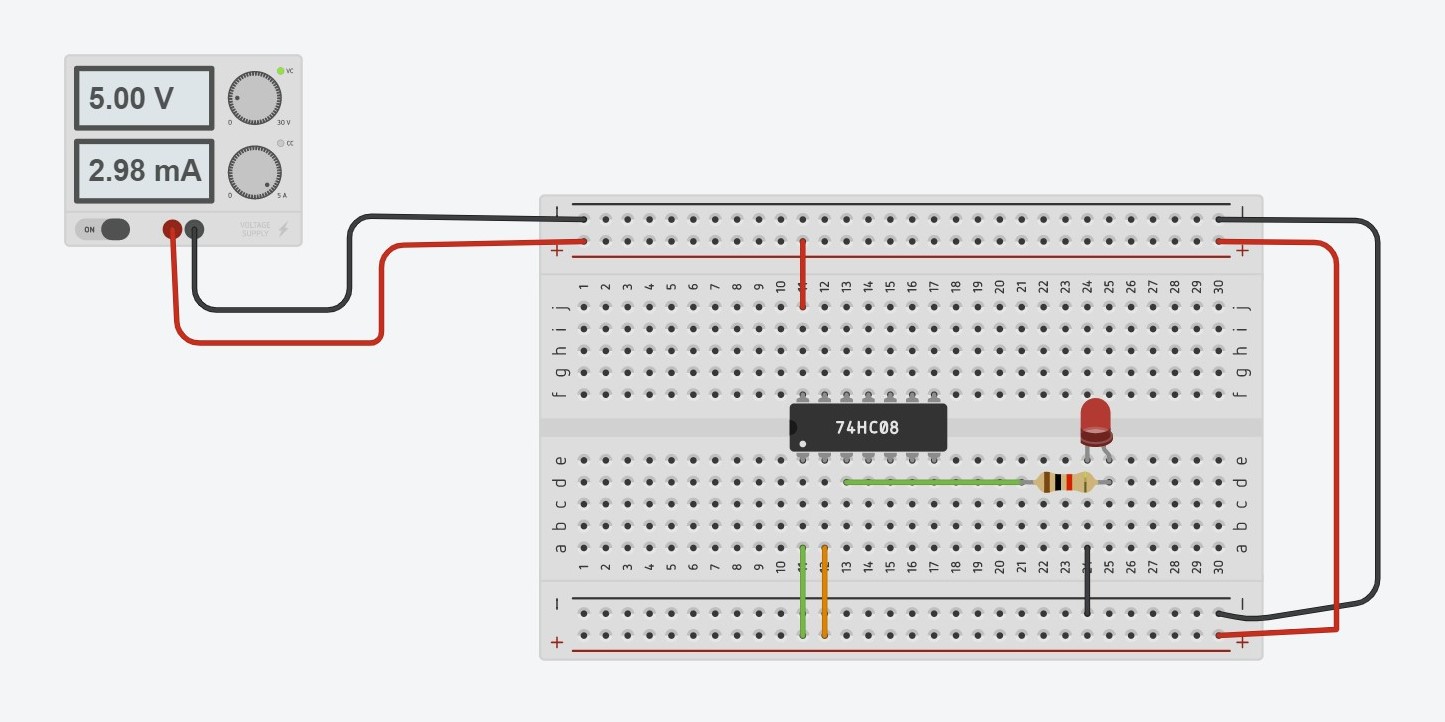
* ***A= 1***



* ***B= 0***

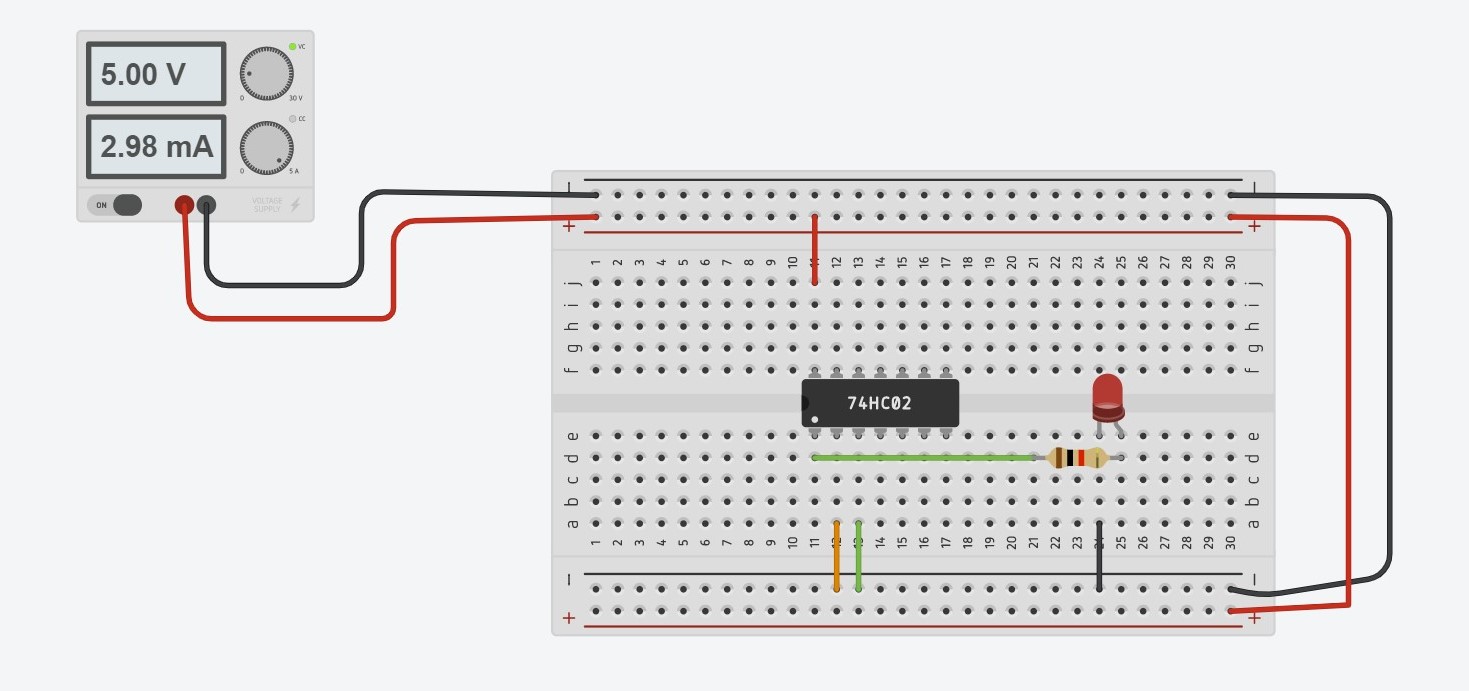


* ***A= 1***
* ***B= 1***

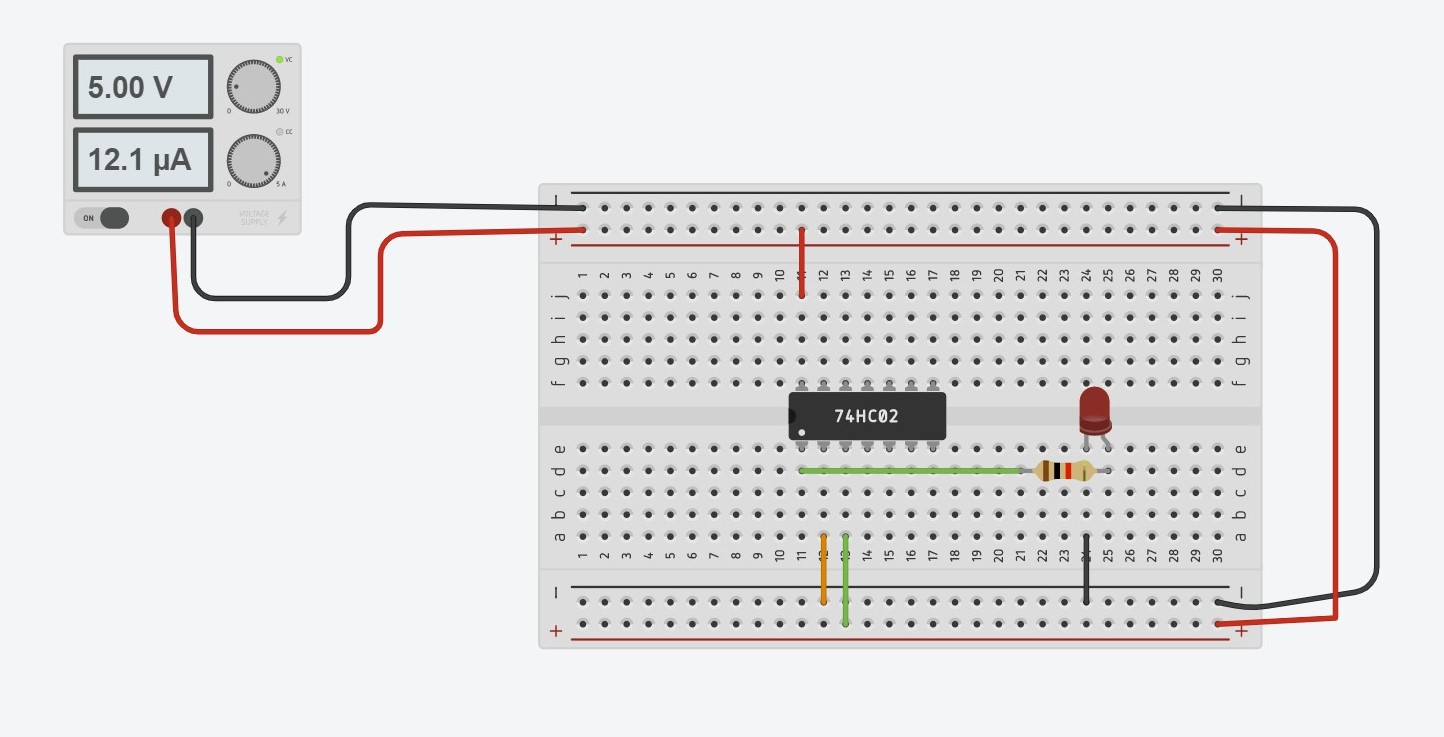


***For NOR Gate\_***

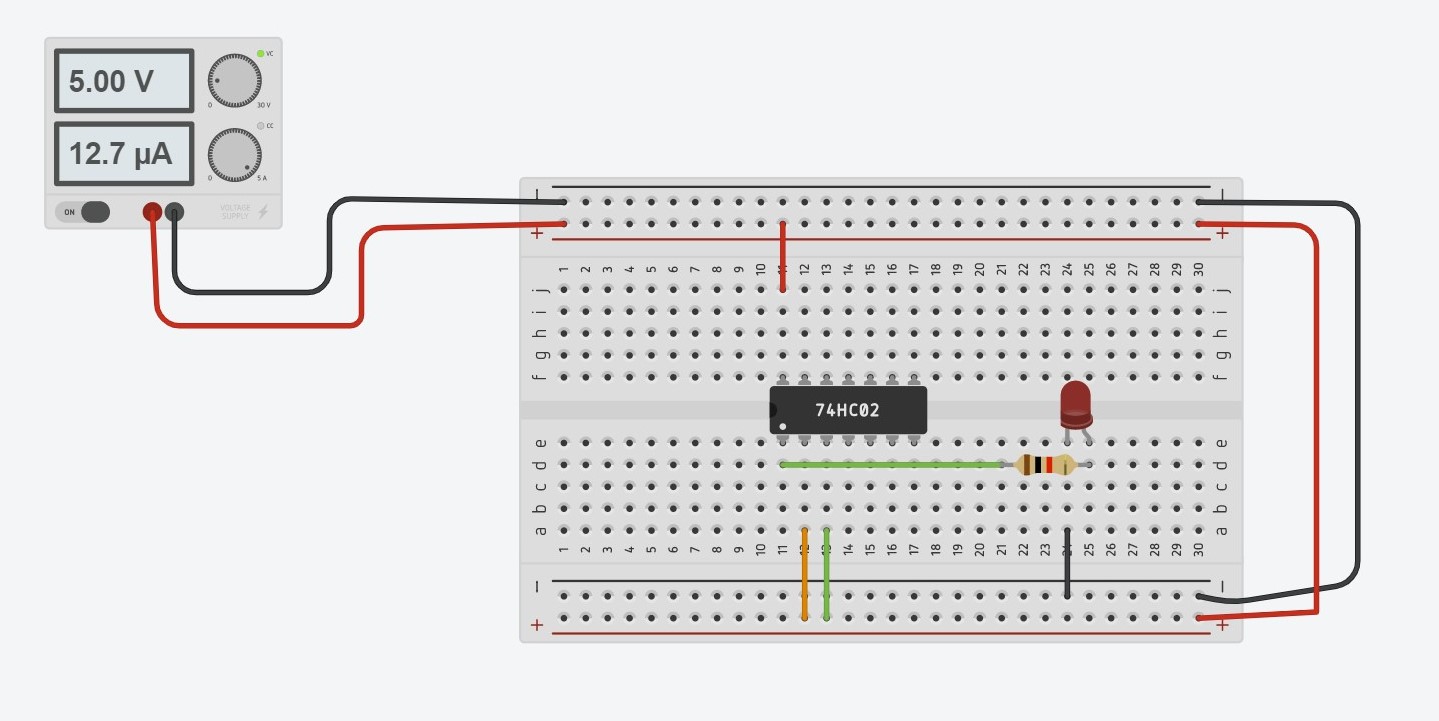
* ***A= 0***
* ***B= 0***

******

* ***A= 0***
* ***B= 1***

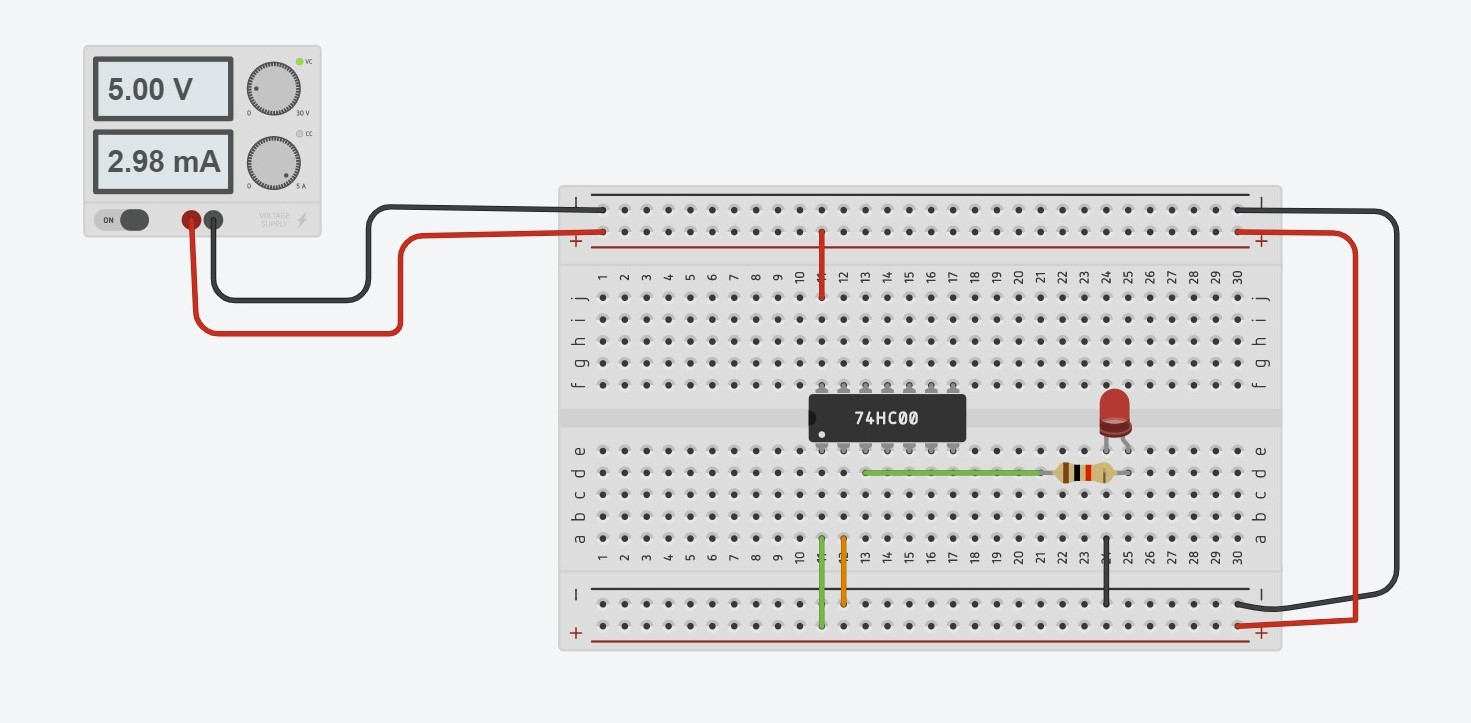
******

* ***A= 1***
* ***B= 1***

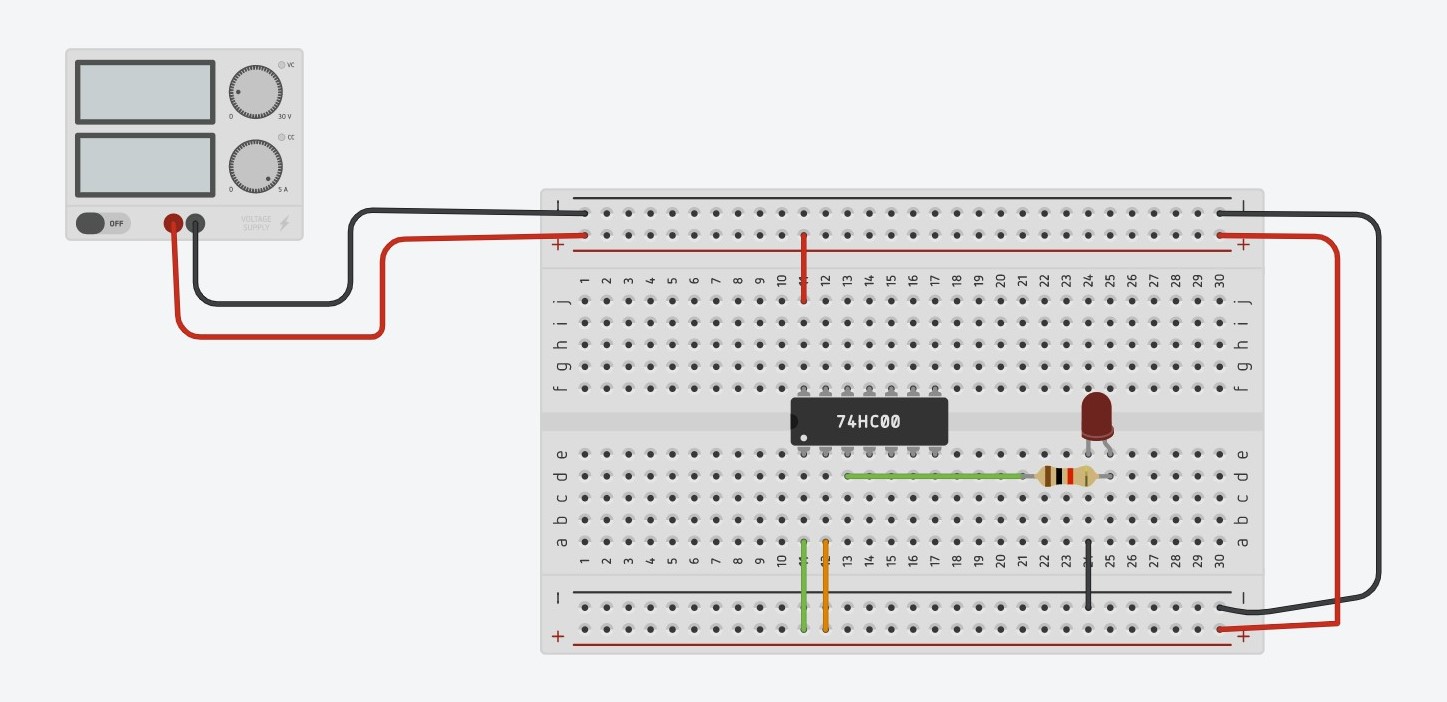
******

***For NAND Gate\_***

* ***A= 1***
* ***B= 0***

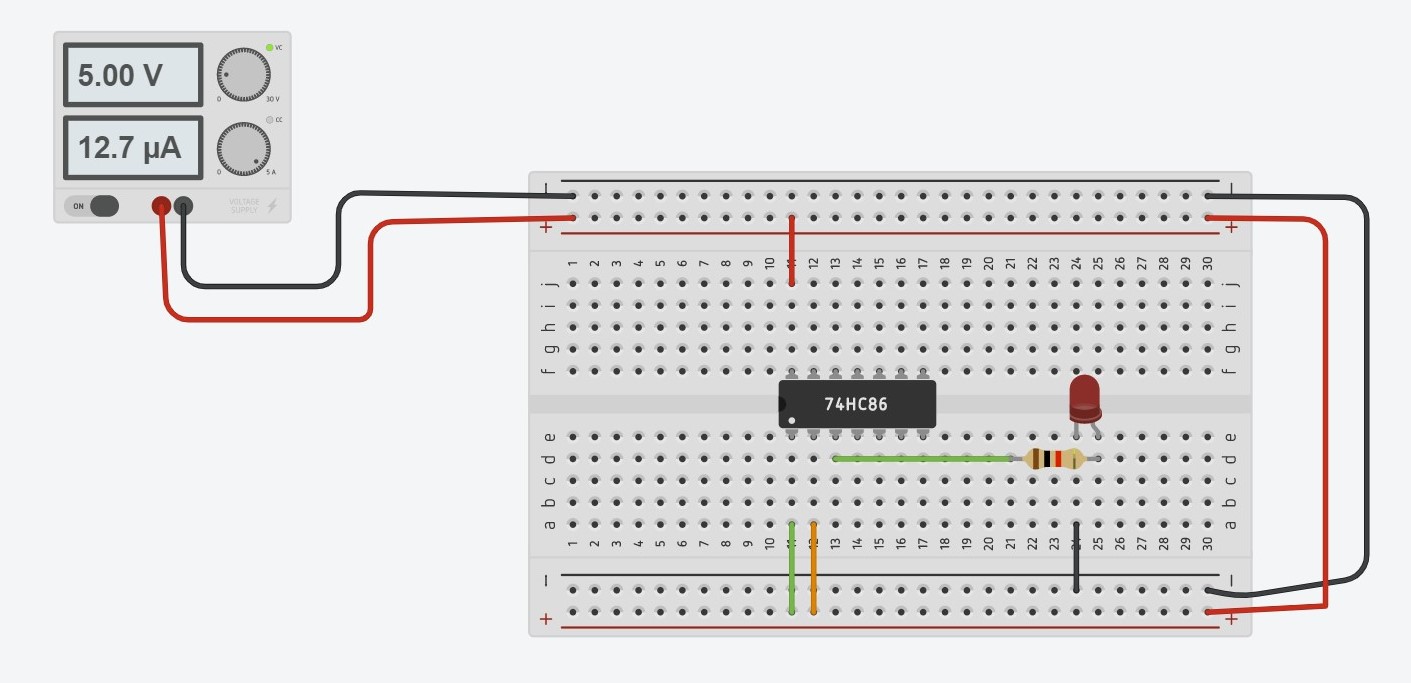
******

* ***A= 1***
* ***B= 1***

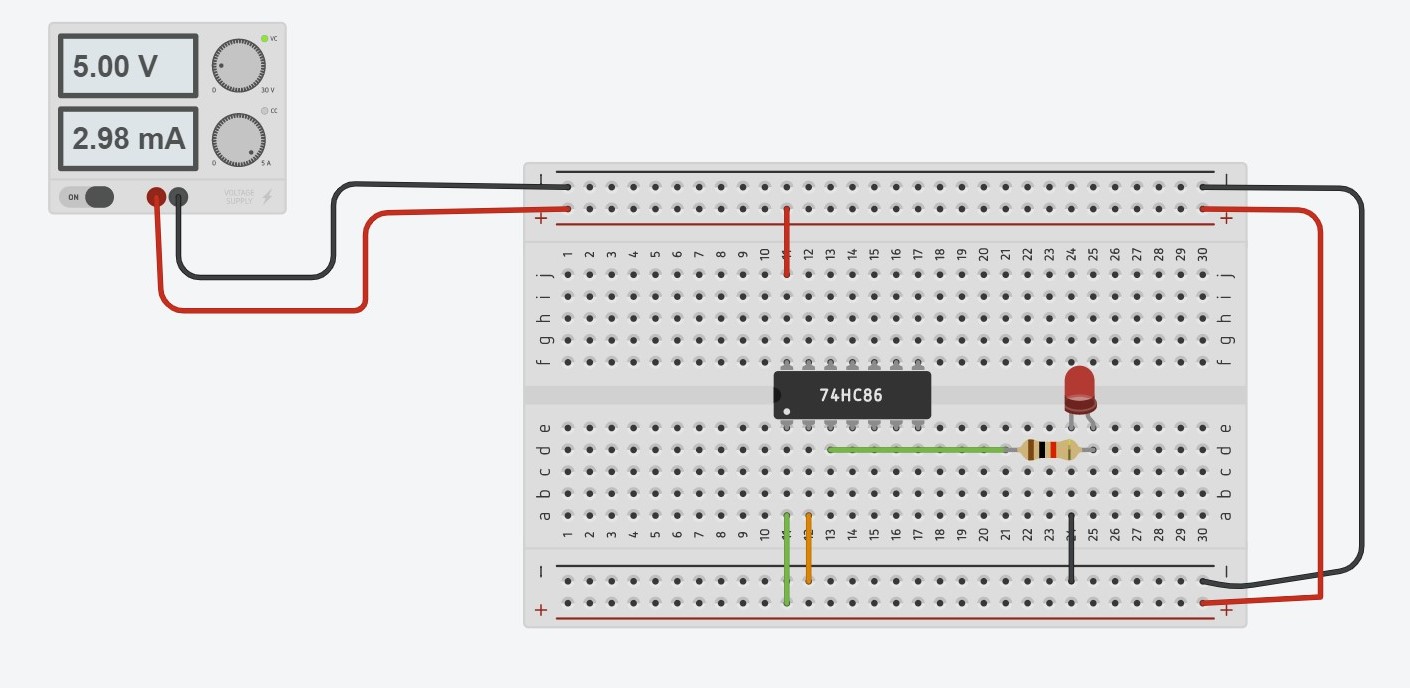
******

***For XOR Gate\_***

* ***A= 1***
* ***B= 1***

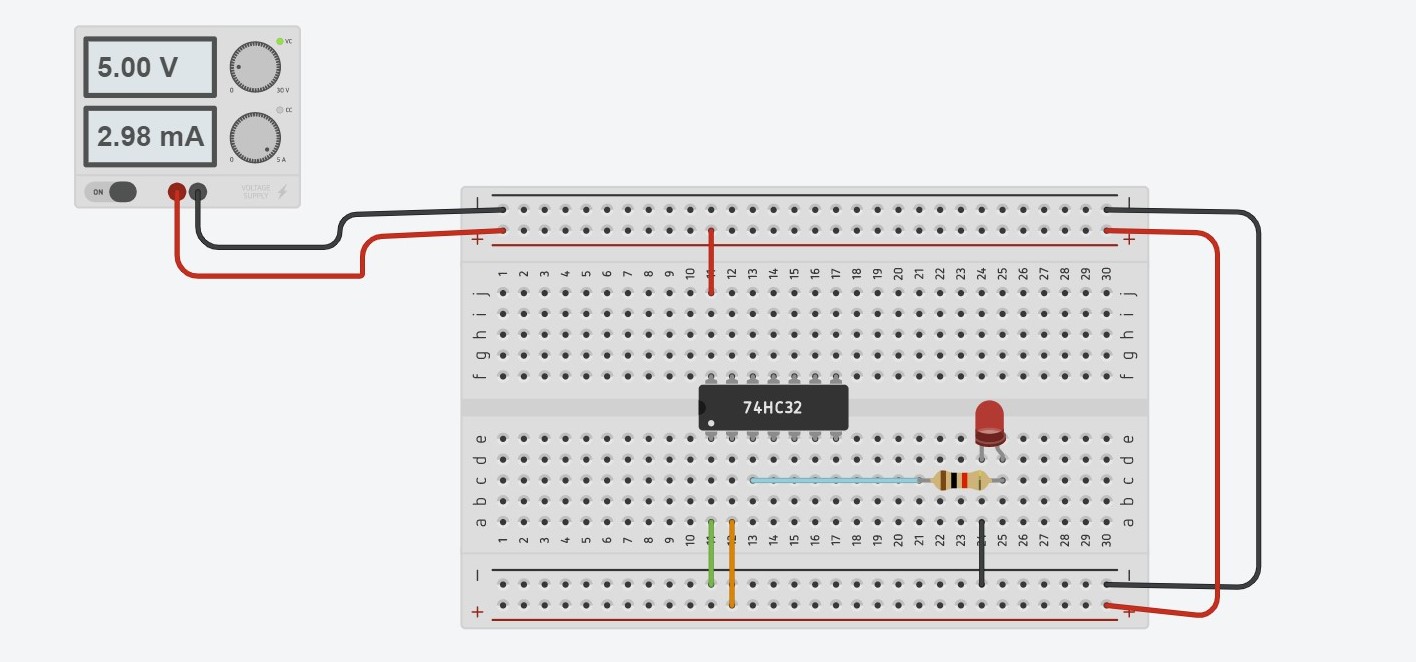
******

* ***A= 1***
* ***B= 0***

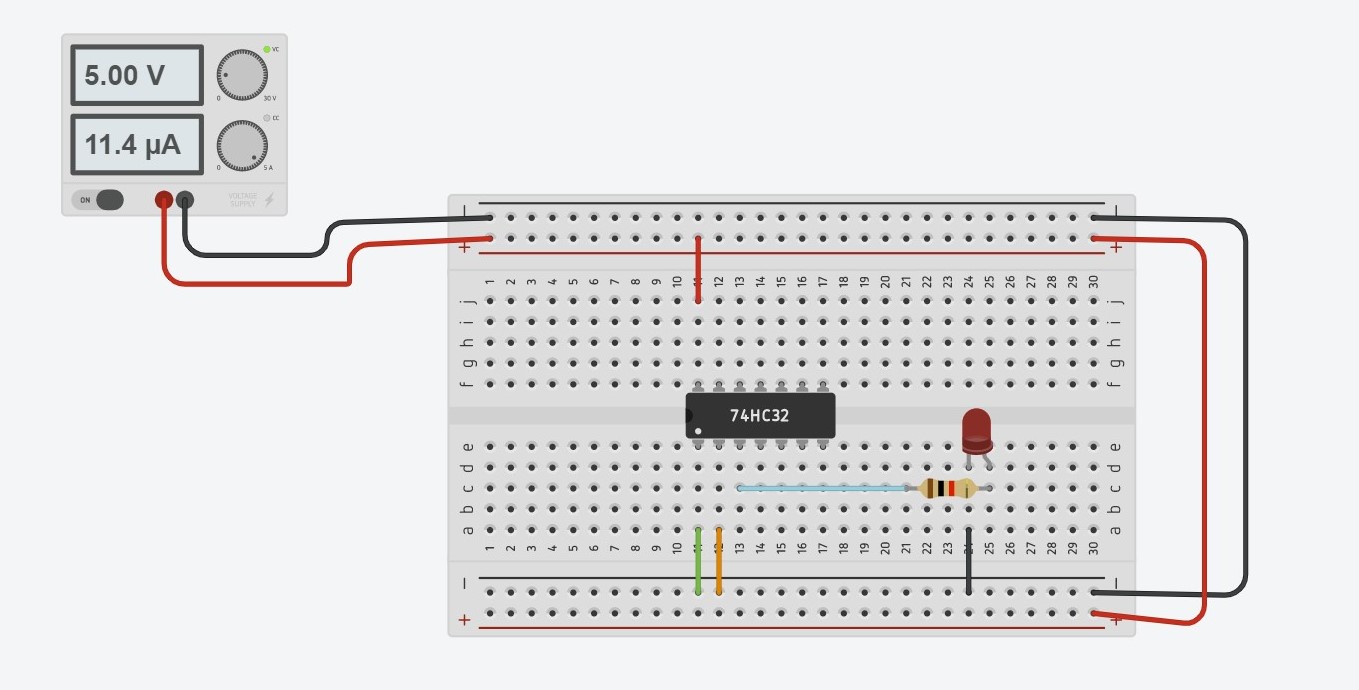
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***FOR OR GATE\_***

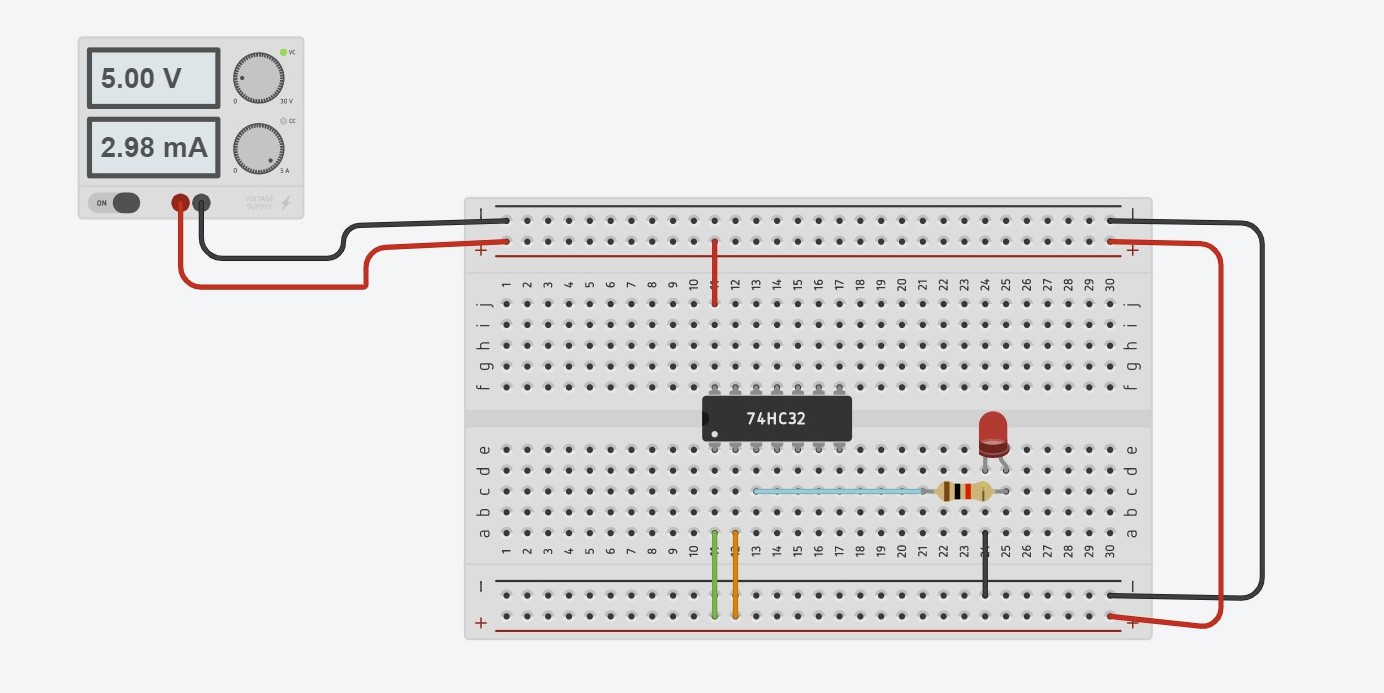
* ***A= 0***
* ***B= 1***



* ***A= 0***
* ***B= 0***

******

* ***A= 1***
* ***B= 1***



TROUBLESHOOTING

* When the output is true the current flows and the light glows, but due to high voltage the led blows up.
* To over come this problem we use an resistor.

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