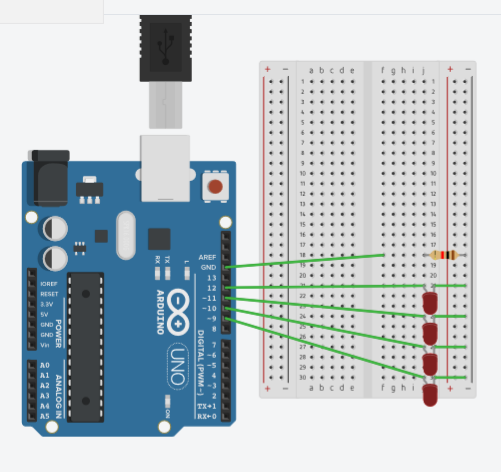
**Exp. 2 Design A LED Chaser**

**Circuit Diagram:**



**Theory:-**

Concept Used:

* In Breadboard, the rows on top and bottom are connected in series whereas in middle the connections in columnwise.
* In arduino when Code is passed , it sends signals to LED connected in form of 0 & 1; i.e. when LED is to be switched off ‘0’ is passed else ‘1’ is passed.
* The positive part is connected to digital pins and negative part is connected to ground(GND).

Learning & Observations:

* I learned how to connect hardware and software.
* I learned how LEDs can be connected in parallel .
* I observed that the the loop of blinking consecutive LEDs continued as per the code.

Problems & Troubleshooting:

* There was problem while uploading code to Arduino , as the port selected was incorrect hence, to solve it I change the PORT.
* Some LEDs was not glowing , so had to replace it.
* The LEDs were not glowing as expected due to some error in code, so the code was edited.

Precautions:

* Arduino Board should be kept at dry place.
* Correct Board/Port is to be selected.
* All connections should be tight.
* The positive side of LED should be connected to digital pin and negative to ground.
* Resistor of appropriate value should be used.

Learning Outcomes:

* How to make proper connection using LEDs and wires.
* Understand the logic how to glow the consecutive LEDs together.