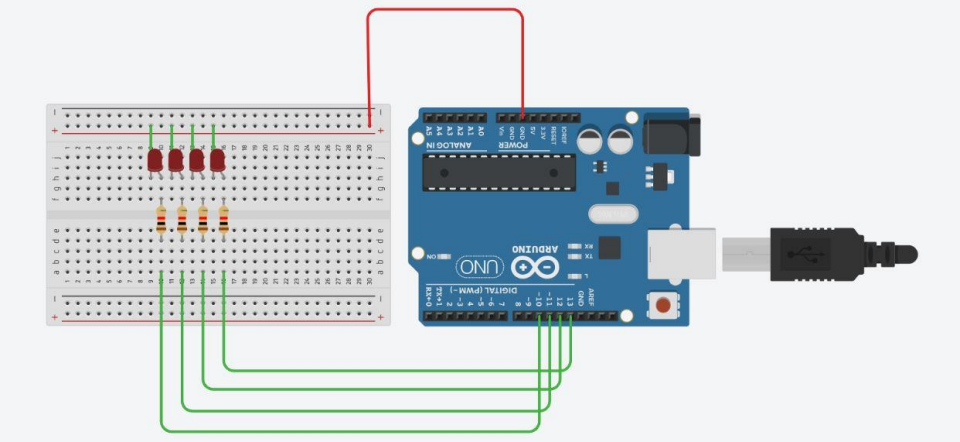
EXP 2

Circuit diagram:



Theory:

Concept Used:

1. Use of Bread Board
2. Parallel connection of LED.
3. Connection of LEDs with Bread board
4. Connection of Bread board with Arduino Uno.

Parallel connection of LED:

In this experiment we use 4 LEDs whose p terminals are connected to the Arduino Uno with the help of Bread Board. Positive terminal of LEDs are seperately connected with the Arduino Uno. Negative terminals of LEDs are connected together which further connected with the ground terminal of the Arduino Uno.

Connection of LEDs with Bread board:

In this experiment we connect 4 LEDs in the middle row of the Bread board along with the resistor in such a way that they form a parallel connection. After this we connect all the negative terminals of the LEDs to the upper row of the Bread board which further connected with the ground pin of Arduino Uno.

Learning and Observations:

In this experiment we learnt about:

1. Algorithms used for making chaser.
2. LEDs in parallel connection.

3. How to use multiple digital pins of Arduino Uno.
4. Connections in Bread Board.

Observations:

1. When we change the position of delay in the code whole pattern will change.
2. If we change the value of delay from 1000ms to 2000ms then LEDs will glow for 2 seconds.
3. When delay become 50ms, then we cannot notice the pattern.

Precautions:

1. The connections should be tight and firm.
2. Negative terminals of LEDs should be connected to the Ground pin of Arduino Uno.
3. There should be no compilation error in the code.

Learning Outcomes:

1. Code for chaser.
2. Parallel connection of LEDs.
3. Different patterns we get from simple change.